ECONOMIC LIFE

IN THE

VIJAYANAGAR EMPIRE

SANKARA PARVATHI PRIZE THESIS (1941)

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VIJAYANAGAR EMPIRE

BY

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PREFACE

History is more than a chronicle of the lives of kings and queens, their wars and conquests, palace intrigues and revolutions. Though such details are of interest they form only a small part of real history, which largely consists in a study of the social, religious and economic forces that have influenced the lives of nations. No history of India will be complete without a comprehensive study of the social and economic development of the people from early times.

The economic life of a people grows gradually; and political boundaries and changes of empires do not exercise much influence over it. But the period of the political supremacy of a particular dynasty or empire affords a convenient frame for a study of the the economic life of its people. The history of the Vijayanagar Empire covers more than three centuries (1336—1672 A. D.), and the Empire comprised practically the area of the present States of Madras and Mysore and, for a time, included parts of Burma and Ceylon as well. As early as 1900 Robert Sewell presented, for the first time, the history of this great Hindu Empire. Since then much valuable material in the shape of inscriptions, literary works and travellers' accounts has become available, making it possible to study in detail its administrative, social and economic history. In recent years some work has been done on the administrative and social history of Vijayanagar. The following work, accepted by the University of Madras as the thesis for the Sankara-Parvathi prize for the year 1941, attempts to present an account of the main currents of economic life in the Vijayanagar Empire. The book is calculated to serve as a supplement to my *Administration and Social Life under Vijayanagar* published by the University of Madras (1940).

In preparaing this work, I am indebted to various scholars who by their valuable publications have enriched our knowledge of the history of the Vijayanagar Empire.

I am under obligation to the Archaeological Survey of India for the permission accorded to me to consult transcripts and impressions of unpublished inscriptions.

My thanks are due to the Syndicate of the University of Madras for sanctioning the publication of this work.

University of Madras,
25th May, 1951.

T. V. MAHALINGAM

CONTENTS

Preface i

CHAPTER I THE COUNTRY AND THE PEOPLE

Section 1: Villages and Towns ... 1
Section 2: Population ... 5
Section 3: Village Sabha ... 24
Section 4: Professional Associations and Guilds ... 27
Section 5: The Temple ... 35

CHAPTER II AGRICULTURE AND LAND TENURES

Section 1: Articles of Agricultural Production ... 43
Section 2: Irrigation ... 48
Section 3: Methods of Agriculture 59
Section 4: Extension of Cultivation and Reclamation of Land ... 74
Section 5: Systems of Land Tenure ... 81

CHAPTER III INDUSTRIES 92

CHAPTER IV TRADE AND COMMERCE

Section 1: Articles of Trade ... 109
Section 2: Commercial Communities ... 118
Section 3: Means of Communication and Transport ... 140
Section 4: The State and Commerce ... 154

CHAPTER V TAXATION, CURRENCY AND MEASURES

Section 1: Taxation ... 161
Section 2: Coins, Measures and Weights ... 174

CHAPTER VI THE STATE AND ECONOMIC WELL-BEING

Section 1: Charity and Famine Relief 190
Section 2: Standard of Life ... 198

Bibliography ... 209
Index ... 213

CHAPTER I

THE COUNTRY AND THE PEOPLE

Section 1

Villages and Towns

The Vijayanagar Empire in its palmy days covered the whole of the present Madras State excepting the the districts north of the river Kṛṣṇā, the district of Malabar in the west coast and the Union of Travancore and Cochin, and included Mysore, as also the districts of Dharwar and North Canara in the Bombay State. According to the Persian ambassador, Ábdur Razzāk, the Empire extended from "the borders of Sarandip to those of Kulburga and from Bengal to Malibar a space of more than thousand *parasangs*".[1] Paes, the Portuguese chronicler, referring to the extent of the Vijayanagar Empire under Kṛṣṇadēva Rāya says: "This kingdom of Narsymga has three hundred *graos* of coast each *grao* being a league along the hill-range (*serra*).........until you arrive at Ballagate and Charamaodel (i.e. Cōlamaṇḍala) which belong to this kingdom; and in breadth it is one hundred and sixty-four *graos*; each large *grao* measures two of our leagues so that it has six hundred leagues of coast, and across it three hundred and forty-eight leagues..............across from Batacalla (Bhatkal) to the kingdom of Orya".[2] The area covers about 1,40,000 square miles.[3]

Peninsular India has a peculiar physical geography. Like peninsular Italy it is surrounded by the sea on three sides. Along its western boundary runs a huge mountain chain which has influenced the climate and agricultural production of the peninsula. Along the east coast also runs

1. Elliot, *The History of India as told by its own Historians*, Vol. IV, p. 105.

2. Sewell, *A Forgotten Empire*, p. 239.

3. It may be interesting to note that an epigraph of the time of Sadās'ivadēva Mahārāya states that the Kuntalades'a over which he ruled was one hundred and twenty-six thousand *yojanas* in extent. (*Epigraphia Carnatica*, VII, Ci. 62.)

a range of hills culminating in the south in a knot of mountains—the Nilgiri hills. The general slope of the Deccan plateau is from the west to the east and many of the great rivers of South India therefore flow from the west to the east. The mountain chain on the west coast of the peninsula has the effect of arresting the lower strata of rain clouds and causing excessive rain on the seaward side of the coast. Comparatively little rain however falls on the landward side of the range. Where the mountain range is not high, rain clouds are not checked in their eastward course. In the central table-land covered by the modern districts of Bellary, Cuddapah, Kurnool and Anantapur, the rainfall is small and the heat in summer is great.

From the earliest times India has been a land primarily of villages; and in the Vijayanagar Empire also they constituted the most important economic unit. But we have no idea of the number of villages in the Empire though we can be sure that they were close to each other. In the area covered by the Vijayanagar Empire there are now about fifty thousand villages. The epigraphs of the period show that some of them became depopulated owing to various reasons, such as occasional oppressive taxation, devastation on account of flood or the plundering raids of robber gangs. But taking the general course of history during the period, it appears certain that side by side with the decay and ruin of some villages there were a large number of others formed either by rehabilitation of the decayed ones or by the foundation of fresh ones either in the uncultivated wastes[4] or the forest areas,[5] and their grant as *sarvamānyams* to Brāhmans or as *devadāna* or *devadāya* to temples. Thus there is sufficient evidence to believe that during the Vijayanagar period the number of villages in the Empire was gradually on the increase.

The villages consisted of wet lands, dry lands, gardens, pastures, village sites and irrigation places like tanks or

4. *MER* 1913, para 52.
5. 492 of 1917; *Rep.*, 1918, para 48.

lakes.[6] In some places the main village had a number of suburbs or *piḍāgais* or hamlets.[7]

The boundaries of villages were marked by stones set up for the purpose with particular marks on them such as the triśūla.[7a] Such boundary stones were at times deified, and worship was offered to them at periodical intervals.[8] Houses were on elevated parts of the village, each community living as far as possible, in a particular area.[8a] Thus we get reference to the *agrahāras* (Brahmans' quarters) in the villages besides such streets as *Kammāḷatteru*,[9] and *Kaikkōḷatteru*.[10] The weavers or *Kaikkōḷas* appear to have occupied the precincts of the temple as well. The humbler classes of society, particularly the non-caste people, appear to have lived in an area far away from the main habitat of the village. Thus Barbosa refers to the Poleas as residing "in the fields and open campaigns in secret lurking places" and the Pariahs "in the most desert places".[11] The Muslims appear to have lived in separate quarters provided for them.[12]

The observations, made by the foreign travellers who visited the Vijayanagar Empire, show that there were in it many populous and flourishing towns very near one another Ábdur Razzāk says that when travelling between Mangalore and Bednur he arrived "each day at a town or village well populated".[13] Nikitin, the Russian traveller who visited the Empire some four decades after Ábdur Razzāk and travelled through the north-western portions of it, observes that between the large towns there were a good number of

6. 59 of 1914; *Rep.*, 1915, para 44,
7. 586 of 1926; *Rep.*, 1927, para 92.
7a. 432 of 1917; 213 of 1924.
8. See Francis, *South Arcot District Gazetteer*, pp. 92-93.
8a. *Barbosa*, I, p. 202.
9. 396 of 1911.
10. 311 of 1911.
11. *Barbosa*, II, pp. 65, 68, 69.
12. Sewell, *A Forgotten Empire*, p. 256.
13. Elliot, *History of India*, IV, p. 104.

small ones, that he passed through three such towns each day and occasionally four and significantly remarks, "so many *kos*, so many towns".[14] Duarte Barbosa notes that there were in the Empire many great cities, towns, villages and fortresses,[15] and this is supported by the statement of Paes that the whole country was thickly populated with cities and villages. Thus all accounts seem to agree that there were a large number of urban centres in the Empire. It may be noted in passing that, in the area covered by the Vijayanagar Empire, there are at present about 450 towns.

Many of the towns were old, and only some sprang up in the Vijayanagar period. Various factors contributed to the development of cities and towns. Generally a religious centre or a place of pilgrimage attracted a good population and gradually developed into a city or town. The growing importance of a place on account of its expanding trade converted it into a town, followed sometimes by the founding of a fair. Again the choice of a particular place as the administrative headquarters of the government favoured the growth of a town. Occasionally, cities were founded by the kings to commemorate certain events. For instance, Kṛṣṇadēva Rāya constructed Nāgalāpūr in honour of his wife Nāgalādēvī and ordered his nobles to build for themselves palaces in the new city.[16] Generally the towns were allowed to grow, and not planned and built. Hence many of the towns were large villages covering wide areas. According to Nicolo dei Conti, the walls of the city of Vijayanagar were carried up to the mountains, on account of which it had a circumference of sixty miles.[17] However, the towns may be distinguished from villages in two respects. Firstly they usually depended for their supplies on the villages; secondly a majority of the people in towns were engaged in manufacture and handicrafts which supplied the needs of the people even outside the towns.

14. Major, *India in the Fifteenth Century*, p. 12.
15. *Barbosa*, II, p. 125.
16. Sewell, *op. cit.*, p. 363.
17. Major, *op. cit.*, p. 6; Sewell, *op. cit.*, p. 82.

Among the important and "good sized" towns in the west coast were Ankola, Mergen (Mirjan), Honor (Honāvar), Bhaticala (Bhatkal), Majandur (Baindur), Bacanor (Bārakūr), Barcelore (Basrūr), Mangalor (Mangalore) and Cumbola (Kumbla).[18]

Among other important places in the area were Sangītapura,[19] Bhārangi,[20] Uddhare (the capital of the Eighteen Kampaṇas),[21] Gerasoppe and Bidanur (Bednur)[22] In the central part of the Empire were such important cities as S'rīrangapaṭṭaṇa, Dvārasamudra, Ikkēri, Bankāpura, Raicūr, Adoni, Vijayanagar and Penukoṇḍa, while, in the east and south, were such cities as Koṇḍavīḍu, S'rīs'ailam, Udayagiri, Kālahasti, Tirupati, Candragiri, Pulicat, Mailāpūr, Kāñcīpuram, Tiruvaṇṇāmalai, Cidambaram, Kumbakōṇam, Nāgapaṭṭiṇam, Tañjavūr, S'rīrangam, Madhurai, S'rīvilliputtūr, Tirunelvēli, Rāmēs'varam, and Anantas'ayanam.

The towns had usually good and broad streets flanked with houses. The most well-to-do among the people lived in the high streets. Further, sites were selected for the construction of houses, which were specified by the donors if the sites were the subjects of gift.[23]

Section 2.

Population

If the active commercial life of a country is an index of it teeming population, then it may be presumed that the Vijayanagar Empire was very populous. But in estimating the exact population of the country we are at a

18. *Barbosa*, I, pp. 185-97; Sewell, *op. cit.*, p. 236; see also Fariay Sousa, *Asia Portuguesa*, I, p. 95 (tr. by Capt. Stevens).
19. E. C., VIII, Sa. 163.
20. *Ibid.*, Sb. 329.
21. *Ibid.*, Sb. 152.
22. Elliot, *History of India.*, IV, p. 104.
23. E. C., X, Mb. 172.

disadvantage for there are no records to indicate the number of people in the country. Unlike the Mauryan government, the Vijayanagar government did not maintain a census department, and therefore, for forming a rough idea of the population in the Empire, we have to depend on the passing observations made by some individual contemporary foreign travellers who visited the Empire. Such passing remarks by foreign travellers on the populousness of the Empire are helpful to us only in assessing it in comparison with the population of the respective countries from which they came, but do not help us to arrive at a correct estimate of the number of people in the Empire.

Nicolo dei Conti, who visited the Vijayanagar Empire in 1420 A.D., found that the number of people in it exceeded belief.[24] Some two decades later also, according to Ábdur Razzāk, the Empire was so well populated that it was impossible to give an idea of it without entering into the most extensive details.[25] To the mind of Barbosa it appeared that the west coast was so thickly populated that "it may well be called one town from Mount Dely to Coulam".[26] Likewise Paes said in 1520 that the whole country was thickly populated with cities and villages.[27]

Individual cities were brisk with a large population. Vijayanagar itself was, according to Ábdur Razzāk, "a place extremely large and thickly populated" and such "that the eye has not seen nor the ear heard of any place resembling it upon the whole earth".[28] Nicolo dei Conti estimated the population of the city at "ninety thousand men fit to bear arms"[29] while Barbosa remarks that it was a great city wherein dwelt people without number in great and fair palaces, was provided with many water tanks and that it

24. Major, *India*, p. 32.
25. Elliot, *Hist. of Ind.*, IV, p. 109.
26. *Barbosa*, I, p. 194.
27. Sewell, *op. cit.*, p. 237.
28. Elliot, *op. cit.*, IV, p. 105.
29. Major, *India*, p. 23.

had "great traffic and endless number of merchants and wealthy men". He also observes that the city had long streets with many open spaces, "where the folk are ever in such numbers that the streets and places cannot contain them".[30] Paes says it was bigger than Rome and remarks: "The people in this city are countless in number, so much so that I do not wish to write it down for fear it should be thought fabulous, but I declare that no troops, horse or foot, could break their way through any street or lane, so great are the numbers of the people and the elephants". In another context, he says: "Of the city of Bisnaga they say that there are more than a hundred thousand dwelling houses in it, all one-storied and flat-roofed".[31] It has been suggested that taking that each house on an average contained five persons there were at least five hundred thousand people at the capital.[32] This estimate however appears to be too modest, for it does not seem to take into account the citadel containing the king's palace and the houses of the courtiers and other residents in the area, besides the large retinue kept for military purposes, not to speak of the poorer classes of people in the city.

Though we get such useful information about the populousness of the country, it is not possible to estimate the proportion of the urban population to the rural population in the Empire. At the present day "the growth of large cities constitutes perhaps the greatest of all the problems of modern civilization". As has been said above, according to recent statistics there are about 450 towns in the area covered once by the Vijayanagar Empire, besides about fifty thousand villages; and the urban population is only a fraction of the rural population. The general tendency at the present day in the progress of the urbanisation of India is an increase in the population of towns with

30. *Barbosa*, I, pp. 200-202.

31. See Sewell, *op. cit.*, p. 290.

32. Moreland, *India at the Death of Akbar*, p. 14 *fn;* with this may be compared the population of Paris in 1600, which was 400,000 and of Rome in 1520, which was 8,5000 (*Ibid.*).

over fifty thousand people while the population of medium sized towns of ten to twenty thousand does not keep pace with the general increase in the population of the country. The static nature, if not the decadence of the medium-sized towns, and the rapid growth of the larger cities, may be said to be due to the influence of commercial and industrial development and their affording greater scope for employment as being centres of administration and education as also the lure of the city's companionships and amusements. But it may be presumed that the urbanisation could not have gone in the Vijayanagar days at such a rapid rate as at present, largely on account of the lack of the modern means of transport and the non-existence of large scale industrial enterprises, the localisation of which at certain places is a feature of this industrial age. Thus it is reasonable to assume that the proportion of the rural to the urban population in the Vijayanagar Empire was greater than at present. The towns and the cities depended on the villages for the supply of their wants. Only those, who could afford the luxuries of city life or had to stay in the cities in connection with their occupation lived in towns and cities.

Equally difficult is it to calculate, with the evidence available at present, the exact number of people that lived in the Empire. But Moreland makes bold to calculate the number of people in the Vijayanagar Empire from a modern European analogy. Arguing that since five of the contemporary chroniclers, of whom four at least may be regarded as independent, put the nominal strength of the army at about one million, while two of them add that it could be increased to two millions if necessary, and according to the Portuguese accounts of the battle of Talikota (Rakṣas Tangdi) the Deccan army consisted of half a million, and making allowance for the wastage of the invading armies which had marched some distance from their base to the scene of battle, he puts the total strength of the two armies at one million. He proceeds, "According to the published figures, France had arranged before the year 1914 to

mobilise one out of 31 and Germany one out of 32, so that, if the recruiting organisation of the Deccan and Vijayanagar was as efficient as that of modern France and Germany, their united strength of a million would imply a population of about thirty millions, while the population would be greater if the efficiency was less."[33]

It must be said that Moreland's calculation of the Vijayanagar and Deccan forces is undependable. Nicolo Dei Conti, who visited Vijayanagar in 1420, says that the strength of the army at the capital was 90,000 "fit to bear arms". Ábdur Razzāk, who was at the capital two decades later states that the Vijayanagar army consisted of eleven lakhs of men. Nikitin (1474) estimates it at 10,00,000 while Duarte Barbosa gives the same figure and adds that men at arms were paid. Paes remarks that Kṛṣṇadeva Rāya had continually a million fighting troops and that whenever necessary he put into the field two million soldiers, and adds that "although he takes away so many men from his kingdom it must not be thought that the kingdom remains devoid of the men; it is so full that it would seem to you as if he had never taken away a man, and this by reason of the many and great merchants that are in it. There are working people and all other kinds of men who are employed in business, besides those who are obliged to go into the field."[34] These statements made by different chroniclers, who visited the Vijayanagar Empire at different periods, show that the normal strength of the army in the Hindu kingdom was about a million, and it was increased during times of war. Thus the strength of the combined armies of the Vijayanagar and Deccan kingdoms must have been at least two millions. But with regard to the proportion of the strength of the army to the population in the Empire, Moreland's calculation that for one soldier in the army there must have been a population of thirty in the Empire is untenable. We are not sure if we can compare the

33. *India at the death of Akbar*, p. 19.

34. Sewell, *op. cit.*, p. 280.

conditions in Europe of recent years with what obtained in Vijayanagar.

An attempt may be made to estimate it in the following way also. In 1822 a rough calculation was made of the number of people in the Madras State. According to that calculation, the population of the present Madras State and the District of North Canara in the Bombay State was about thirteen and a half millions. We have no figures for Mysore, but in 1871 the population of the State was calculated to be about five millions. Considering the slow increase in population in the last thirties of the last century it is reasonable to assume that the population of the State in 1822 might have been about three and a half millions. Thus in 1822 the total population of the area, once covered by the Vijayanagar Empire, may be assumed to have been about sixteen millions. Between 1880 and 1900, even after a century of comparative peace the population of the same area was not more than twenty-five millions. The seventeenth and eighteenth century history of South India was largely marked by frequent wars and the outbreak of pestilence on account of which the population of the country could not have increased fast. So it may be reasonably assumed that the population in the Vijayanagar Empire may not have been far more than about fourteen millions. There is no reason to think that the growth of population in the Vijayanagar days could have been as fast and steady as at the present day. Under mediaeval conditions the growth was necessarily slow. Among the causes for such slowness or even sheer stationariness may be mentioned the recurrence of famine, the frequency of pestilence, the destruction and decimation caused by wars and unsatisfactory sanitary conditions.

A remarkable feature of the populational development in the period was emigration to foreign countries and internal migration. It was always the spirit of commercial adventure that made some sections of the people sail to

foreign countries for commercial business in those regions particularly in Burma, East Indies and the Malacca. But internal migration, both rural and urban, must be accounted for otherwise, such as economic, social, political and religious. Sufferings caused to the people by drought, flood, famine and an oppressive financial policy, made the people migrate from the affected place to one more alluring. Groups of persons belonging to a community or caste migrated to places to which they were invited, often with grants of land. With the expansion of the Empire in the south and the organisation of its administration a large class of dependents and fortune-seekers migrated to the provincial courts. In the fifteenth and sixteenth centuries a good number of Telugu Veḷḷāḷas migrated for instance to the Madhurai country. Religious causes, such as the growing importance of a place of pilgrimage or a religious centre, led to the migration to such places by people devoted to or dependent on them.

Classes of people

From the economic point of view the vast population of the Empire may be divided into different groups or classes. Broadly speaking, they may be brought under two classes, the consumers and the producers. While the latter were engaged in the different productive occupations and supplied the articles of consumption for the people, the former, belonging, as they did, to the many non-productive occupations, constituted the consumiug classes in the Empire. From the larger standpoint of the social well-being of the country these classes were no less important than the producers, for, their services to society were equally necessary. But from the mere economic point of view, they lived on the sweat and toil of the producers.

Among the consumers, mention may first be made of the nobles of the Empire who held important posts in public administration, governed parts of the Empire and enjoyed good revenues as also many important privileges. The

officers of government were granted large slices of territory over which they ruled, and were required to pay a fixed annual financial contribution to the imperial exchequer which, according to Nuniz, was usually half of their income, and maintain for the king a sufficient number of troops and serve him in his wars. According to the chronicle of Nuniz, Acyuta Rāya had his foot-soldiers paid by his nobles who were obliged to maintain six hundred thousand men and twenty-four thousand horse, an equal number of which they were required to have. "These nobles are like renters who hold all the land from the King and besides keeping all these people they have to pay their cost; they also pay him every year sixty *lakhs* of rents as royal dues. The lands, they say, yield a hundred and twenty *lakhs* of which they say they must pay sixty to the King and the rest they retain for the pay of the soldiers and the expenses of elephants which they are obliged to maintain".[35] The same chronicler gives an account of Salvanayque, the Sāḷuva Vīra Narasimha Nāyaka or Sāḷuva Daṇḍanāyaka of the inscriptions, who was lord ot Choramaodel (Cōḷamaṇḍalam), Nāgapaṭṭiṇam, Tanjāvūr, Bhuvanagiri, Dēvīpaṭṭiṇam, Tirukkoil (Tirukkōyilūr), Kāyal and other territories bordering on Ceylon. He had an income of 11,00,000 *pardaos* of gold of which he paid one third to the king besides maintaining for the king thirty thousand foot, three thousand horse and thirty elephants. Likewise Ajaparcatimapa, the lord of Udayagiri and Koṇḍavīḍu had an annual income of 8,00,000 *pardaos*, three-eighth of which he paid to the government besides making a military contribution of twenty five thousand foot, one thousand five hundred horse and forty elephants.[36] There were many such officers to whom parts of the Empire were granted for enjoyment and administration. Nuniz says that there were two hundred *nāyakas* in the Empire among whom the Empire was divided. Besides these nobles, there were a large number of other officers

35. Sewell, *op. cit.*, p. 373.
36. *Ibid.*, pp. 384-6

with whose help the government was carried on. At the capital there was a big secretariat which Ábdur Razzāk describes as follows: "On the right hand of the Palace of the Sultan (the Vijayanagar Emperor) there is the *dīwān khāna* or minister's office, which is extremely large and presents the appearance of a *chihel situm* or forty-pillared hall; and in front of it there runs a raised gallery, higher than the stature of a man, thirty yards long and six broad, where the records are kept and the scribes are seated."[37]

It appears certain that the complicated machinery of administration necessitated the maintenance of a large secretariat; and clerical service afforded employment to a proportion of the population of the country as it happens even today. Then there was required an army of servants to collect the revenues and customs of the government, which in a large number of cases were farmed out to individual bidders. Besides, each village had a staff of servants or officials among whom were the *gauḍa* (munsif), *shanbhog* (accountant), *tōti* and *talaiyāri*. We do not know how the members of the clerical service with the government were appointed or the rates of their pay and the conditions of their service. But the other employees, who were connected with the rural and revenue administration in the Empire, were usually paid by assignments of lands (*jāgirs*), the produce from which they enjoyed. The revenue farmers had for their remuneration the difference between their collections and the money they paid to the imperial exchequer.

Another form of state employment was service in the army. Reference has been made earlier to the enormous strength of the army under Vijayanagar. The huge forces consisted of two parts, the imperial standing army and the feudal levies. Duarte Barbosa's calculations indicate that the trained armies of the kings were about one hundred

37. Elliot, *op. cit.*, IV, p. 107.

thousand, the cavalry alone being twenty thousand.[38] This is confirmed by Paes.[39] Besides, the kings maintained a special force at the capital which Nuniz calls the "King's Guard" consisting of foot-soldiers, horses and elephants. To that group belonged some two hundred horsemen who in some respects resembled the *Ahadis* of the Mughal court. These were all paid by the king. According to Paes, the pay of the men of the guard ranged between six hundred and a thousand *pardaos*. This would show that the annual pay of the highest military officer was about Rs. 47,000 which was not low considering the enormous privileges enjoyed by him.[40] It appears officers of high rank in the imperial service were remunerated on a very liberal scale out of all proportion to the existing conditions of the age. The ordinary soldier got a monthly pay of about four or five *pardaos* which Dames calculates as ranging between £ 1 10sh and £ 1 17sh 4d., or in Indian rupees between 22/8 and 28. Dames however thinks that "this would not be considered low even at the present day, and in the early sixteenth century, when taken in connection with the other privileges, it meant affluence".[41]

But the feudal levies, that were assembled during times of war, constituted a very large portion of the armies that marched to the battle field.

Service in the army was not confined to the Hindus only. The Muslims were encouraged to settle in the Empire and entertained in the army. They were allotted *jāgirs* and allowed to follow their own religion. They were so much in the confidence of Kṛṣṇadēva Rāya for instance that he sent those in his service to lead the van to the battle at Raicūr.[42]

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38. *Barbosa*, I. pp. 209-10.
39. Sewell, *op. cit.*, p. 279.
40. Sewell, *op. cit.*, p. 283.
41. *Barbosa*, I, pp. 210 and 211 *fn.*
42. Sewell, *op. cit.*, p. 256.

In this group may be classed the police force. During the days of Dēva Rāya II there were at Vijayanagar twelve thousand policemen under the Bailiff or Prefect. They were each paid thirty *paṇams* per month.[43] The police duties in the outlying parts of the Empire were done by the *Kāvalgārs* who were paid by the grant of rent-free pieces of land and an allowance in grain and money by the local people. They maintained in each village under their charge a *talaiyāri* who did also the duties of the policeman.

The next important occupations to which the people were called were the professions and the liberal arts. In ancient and mediaeval India there were no well defined professions such as law, education, journalism, etc., as at the present day. Much of the educational system was closely interwoven with religion and hence the necessity for a class of specially trained teachers was not felt. But there were many learned men in the Empire. Scholars well versed in the sacred lore were surrounded by batches of students who took their lessons from them. The eminent scholars of the day were patronised by the state; and such patronage was usually the road to success in life. The men of learning of the day were granted lands and villages by the rulers for their maintenance. It was not unusual for a temple to conduct schools within its precincts for which teachers were engaged and remunerated by assignments of land, the income from which they could enjoy. Likewise, the *maṭhas* in the Empire, which were the monasteries of India, were so many educational institutions in the country. Scholars in technical sciences like astrology, astronomy and medicine were also patronised by the courts. Many of the temples of the day maintained each a hospital in which were employed physicians for affording relief to the suffering humanity. Fine arts like architecture, sculpture, painting, dance and music received encouragement in the period and many people lived by such occupations. The innumerable

43. Elliot, *op. cit.*, IV, p. 111.

monuments of the period, military, civil and religious, like forts, palaces, irrigation works and temples, that stand to this day in different degrees of dilapidation testify to the encouragement architecture and sculpture received then and the occupation they gave to good numbers of the population. Painting was a fine art that was dominated largely by the influence of the tastes of the court and the people. The painters who were cultured in the hereditary lore of the country were in demand during the period. Dance and music gave occupation to some people, particularly to the members of the fair sex. The different books written during the period on the theory and science of music indicate its wide popularity. Dance was practised from an early age by the *devaradiyāls* who were the repositories of that noble art. The stage which was then very popular gave good encouragement to dancing. Mention may be made here of the class of engravers who had a busy occupation in engraving on the walls of temples (the record office of mediaeval South India) the minute details of the transactions made in the local area. They engraved the orders of the government both on the temple walls and on copper plates. It was towards the close of the sixteenth century that the Tamilian characters were cast and printing was introduced in South India.

A section of the population belonged to the religious classes. The ascetics and mendicants, those in charge of the *maṭhas* in the Empire—and there were many among them representative of the different religious sections and schools of thought among the population—and the wandering individuals belonged to this group. The *maṭhas* were wealthy institutions. Besides there were many who belonged to the priestly class and ministered to the spiritual needs of the people.[44]

The mediaeval temple, though from the religious point of view was the House of God, employed a large number of

44. Sewell, *op. cit.*, p. 245.

people for service in it. Among them were the manager (*kēḷvi*), accountant (*kaṇakku*)[45], watchman (*meykāval*)[46], temple priest (*gurukkaḷ*) treasurer (*ponbaṇḍāram*)[47], servants in charge of lighting (*tiruviḷakku kuḍi*)[47a] the piper and the drummer, besides a retinue of other servants who had different duties to discharge.

The trading communities in the Empire constituted a good proportion of the population.[48] Among them were both Muslims and Hindus, besides in the later phase of the history of the Vijayanagar Empire and from about the sixteenth century, Europeans like the Portuguese, Dutch and the British. Among the Hindus the Ceṭṭis were the most enterprising of the merchants. The Brahmans also took to this profession.[49] The transport system in the Empire gave employment to a section of the population.

Certain classes of people in the Empire took a great part in the social activities of the age, such as games and amusements, and were patronised both by the State and by the people. Among them were the wrestlers, duellers, rearers of cocks, the puppet-players and others. The king had a thousand wrestlers, who wrestled before him, struck and wounded each other with circlets with points, which they carried in their hands to strike with; and the one, more wounded, went and took his reward in the shape of a silk cloth such as the king gave to the wrestlers. The wrestlers had their own captains and judges, who put them on an equal footing in the field and adjusted the honours to the winner.[49a] Likewise there

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45. 415 of 1912.
46. 299 of 1912.
47. 372 of 1912.
47a. 374 of 1912.
48. Sewell, *op. cit.*, p. 280.
49. *Ibid.*, p. 245.
49a. *Ibid.*, pp. 268, 271 and 378.

were professional duellers. About them Barbosa says: "They are accustomed to challenge one another to duels, and when a challenge has been accepted and the king gives his permission, the day for the duel is fixed by the persons challenged and the weapons to be used must be according to measure. The king appoints seconds and a field for the fight, and when this has been done, they go thither naked, covered only with some cloth wrapped round their middles, with very cheerful faces. Then after saying their prayers they begin to fight and as they are bare it is over in a few strokes in the presence of the king and his court. No man may speak to them while they are fighting, except the seconds, each of them stands by his own man; and this is such a common practice among them that many are slain daily."[50] There appear to have been puppet players (marionette-*bommalāṭas*) in the Empire who commanded popularity. Cock-fighting also gave amusement to the people, and the rearers of cocks appear to have made a living by holding such cock-fights. Some seem to have been engaged in the hunting of bears and elephants for which they used hawks and falcons. A section of the population consisted of beggars and vagrants.

An important function, to which a portion of the population was called, was service, personal and domestic, in courts and private houses. The age was one of luxury, profligacy and show; and the princes entertained a large retinue of servants for different kinds of services in the palace. The policy was followed by the nobles and dignitaries in the Empire who employed servants for domestic work as far as their means would allow. The accounts of the foreign travellers who visited the Empire bear ample testimony to the large number of domestic servants employed in the Hindu court. When the king went out, for

50. *Barbosa*, I, pp. 190-91; see also II, p. 236.

instance, he was followed by two thousand men of good position besides two hundred horses and forty or fifty horsemen with their soldiers. The harem of the kings consisted of many women. The queens had each a house, maidens, women of the chamber, women guards and other servants necessary.[51] According to Nicolo dei Conti the king had twelve thousand wives of whom four thousand followed him on foot whenever he might go and were employed solely in the kitchen. Some of them rode on horseback while the remainder were carried by women in litters of whom two or three thousand were chosen as the king's wives on condition that they would burn themselves with him on his death.[52] Ābdur Razzāk says that there were seven hundred princesses and concubines in the harem of Dēva Rāya II[53], while Paes says that their number was twelve thousand in the court of Kṛṣṇadēva Rāya.[54] According to Nuniz there were in the harem of Ācyuta Rāya over four thousand women.[55] The services they rendered in the palace were many. Some of the women were bearers who carried on their shoulders the kings and their wives, for the distance between one house and another within the palace enclosure was great. There were among them wrestlers, soothsayers and musicians.[56] Paes says: "There are women who handle sword and shield and others who wrestle, and others who blow trumpets, and others pipes; and others instruments . ; and in the same way they have women as bearers (*boyis*) and washing-folk and for other offices inside their gates just as the king has the offices of the household." There were many courtezans who played an important part in the *Mahānavami* festival.[57]

51. Sewell, *op. cit.*, pp. 247-49; *Barbosa*, I, p. 208.
52. Major, *India*, p. 6.
53. Elliot, *op. cit.*, IV, p. 114.
54. Sewell, *op. cit.*, p. 282.
55. *Ibid.*, p. 382.
56. *Ibid.*, p. 382.
57. *Ibid.*, pp. 248-49, 262, 267, 273-74 and 378.

Slavery

While on this subject we may consider the question of slavery in the Empire. There is evidence to believe that this institution was prevalent in Vijayanagar. What the agricultural serf was in the rural areas, the slave appears to have been in the urban areas. But while the former was attached to the soil, the latter was attached to the person of his master. The existence of the institution of slavery is testified to by the foreign travellers, like Ábdur Razzāk, Nicolo dei Conti and Barbosa.[58] In Bidar there was a trade in the black people.[59] The Portuguese, that came to the Empire, followed the custom of the country and employed slaves. Linschoten noted that such slaves were sold in the market like beasts while Pietro della Valle was surprised to see that the "greatest part" of the people at Goa were slaves. The inscriptions of the period also refer to the slaves. One record of 1470 A. D. mentions a *basavaga* (bond-servant),[60] while another refers to female slaves, and states that the Holeyas were dependents at the feet of the Vīra Baṇajigas.[61]

Slaves were obtained from various sources. Certain families sold themselves as hereditary slaves.[62] They were liable to change hands as chattels.[63] A debtor who was an insolvent and could not repay the loan to the creditor became his slave.[64] Captives in war were considered to be slaves.[65] Trade in slaves appears to have increased during times of famine. Barbosa says that when the people on the Coromandel coast were actually starving and many died of

58. Elliot, *op. cit.*, p. 112; Major, *India*, p. 29; Sewell, *op. cit.*, p. 87; *Barbosa*. II, p. 125.

59. Major, *India*, p. 12.

60. E. C. viii, Sb. 258.

61. E. C. v, Bl. 75.

62. S. I. I., i, p. 54.

63. 248 of 1906.

64. Major, *India*, p. 31.

65. *Ibid.*, p. 29.

hunger, the people sold their children for four or five *paṇams* each, and that during such seasons the Malabaris brought them great store of rice and cocoanuts and took away shiploads of slaves.[66] The famine, that raged in South India in 1630 was so severe that parents brought their children to the sea side for sale at five *paṇams* worth of rice. They were transported from that region to other parts of India and the East Indies and sold again to good advantage "if the gaines be good that ariseth from the sale of soules".[67] Besides, women declared inconstant by the *Samayācāryas* or censors of public morals, were liable to be sold in public. Wilks says that the rules of the system varied with the caste of the accused. "Brahman and Komati females were outcasted and branded on the arm as prostitutes; . . . Females of other Hindu castes were sold without any compunction".[68] It is strange that in Malabar young men, who were vagrant and had "no employ, nor father nor mother nor master" with whom they dwelt, were forfeited to the Governor of the country who sold them as slaves.[69]

Though there was such traffic in slaves it appears they were generally treated well.[70]

The producing classes

The people who constituted the producing classes may be grouped under two broad occupations, agriculture and industries. It deserves to be noted here that in Vijayanagar, as in other parts of the country and periods of its history, a large majority of the population lived on land and agriculture. The agricultural population was engaged on land only during parts of the year, and had no regular work during the non-agricultural seasons. Such unemployment among them during periods of the year was

66. *Barbosa*, II, p. 125.
67. Foster, *English Factories in India 1630-33*, Intro. pp. xxxiii and 331.
68. *Ind. Ant.*, XIV, p. 234 *fn.*
69. *Barbosa*, II, p. 30.
70. *Ibid.*, II, p. 60.

minimised by their taking to some rural handicraft or industry which gave the agriculturists a supplementary income; thus the agriculturist turned a rural industrialist for a part of the year. Here a word may be said about the shepherds. Some people lived by rearing cattle in the Empire. There appear to have been two classes among them, the cowherds who kept cows and traded in milk, curd and ghee, and the Kurumbans who tended sheep. The government took interest in their occupation and in times of need, remitted the taxes payable by them.

The industries in the Empire gave occupation to some people. Though the industries of mediaeval times differed from those of the present day in organisation and output some people depended on them for their earning. As said above, even the agriculturists turned to it during the non-agricultural seasons of the year. Every village was a rural economic unit and was practically self-sufficient.

Among those that followed an industrial occupation the more important were the artisans, weavers, and oil-pressers. Any decent village had its complement of artisans, known generally as the *Pañcālas.* The class consisted of five groups namely black-smiths, gold-smiths, brass-smiths, carpenters and idol-makers. According to Hindu tradition Vis'vakarma, the divine architect, gave birth to five sons, Manu, Maya, Tvaṣṭri, S'ilpi and Vis'vajña who were respectively the progenitors of the five artisan communities. Craftsmanship was usually hereditary, and in course of time the five communities got completely separated from one another. The village blacksmith was the supplier of the ploughshares, iron tyres for wheels and bullock shoes. The goldsmiths made articles of jewellery for the people who could afford to have them. The brass-smiths were the makers of the household articles. The carpenters supplied the little furniture of the houses, besides the carts and other vehicles of transport. The idol-makers made idols for the temples in the locality. Thus they con-

stituted an important industrial group, that supplied the necessary articles in demand. During the Vijayanagar days the *Pāñcālas* became further divided; and an epigraph of the time of Dēva Rāya I refers to seventy four divisions among them.[71] At times the quarrels among them assumed serious proportions and called for the intervention of the government. Thus Vīrappa Nāyaka of Madhurai issued a writ to the five sub-sects of the artisan community facilitating their separation from each other and the consequent dismemberment of the community. It appears that the initiative for the order came from the members of the sub-sects themselves.[72]

The Vijayanagar period was marked by social unrest particularly among the humbler classes who clamoured for certain social privileges. Among them the artisans were one, and their demands were satisfied from time to time. According to some inscriptions for instance a member of the artisan group was allowed to go during a car festival round the car with a chisel, a mallet, a nail and a sickle in his hands wearing a cloth round the head and another round the waist.[73]

The weavers who were generally called *Kaikkōḷas* were an influential community who supplied the necessary clothing to the people. They worked on the looms. Usually, as residents in the temple precincts they had some voice in the administration of the temple and the levy of the local taxes. Like the artisans, they also clamoured for some social privileges. Among them were those of using *sangu* (conch) aud *daṇḍu* (palanquin) on all good and bad occasions.[74] The dyers were akin to the weavers and dyed the clothes and silks in different colours.

The industry of oilpressing was carried on in almost all important villages. The seeds, that were pressed for oil, were gingelly, cocoanut and castor.

71. 804 of 1917.

72. 309 and 378 of 1916; *Rep.*, 1917, para 55.

73. *Nellore Inscriptions*, III, Ud. 20; 204 of 1902; V. R. *I.M.P.*, II, No, 771.

74. 162 of 1918; 473 of 1921; 291 of 1928-29; *Rep.* 1929, para 62.

The other important professionals were the potters, toddy drawers and leather workers. Much information about them is not available. But they were important sections of the community and were engaged in the productive concerns. The washermen and barbers were also important functionaries in each village and town. A section of the population lived on the exploitation of minerals and work in the mines.[74a]

Section 3

Village Sabha

An important feature of the administration of local areas was the active functioning of what may be called the local assemblies which administered the local areas. The government of the rural parts was organised in two ways; and there were two types of local institutions. The first was the *sabhā* or the *ūr* in the village and the second was the *nāḍu* a larger rural division. Besides, in some places the people were organised into corporate associations and

74a. It may be of interest to note here the percentage of the distribution of the Indian population according to occupation or means of livelihood as compiled from the All India Census Report, 1931.

A. Production of Raw Materials ...		65.84
1. Exploitation of animals and vegetation	65.6	
2. Exploitation of minerals ...	.24	
B. Preparation and supply of material substances		17.56
1. Industry ...	10.38	
2. Transport ...	1.65	
3. Trade ...	5.53	
C. Public Administration and Liberal Arts ...		2.86
1. Public force ...	.56	
2. Public Administration ...	.69	
3. Professions and Liberal Arts ...	1.61	
D. Miscellaneous ...		13.74
1. Persons living principally on their income ...	.16	
2. Domestic service ...	7.51	
3. Insufficiently described occupations ...	5.03	
4. Unproductive ...	1.04	
Total		100.00

discharged some political functions. Among them were the professional guilds and mercantile corporations. Further the temple was an important institution that played a notable part in the economic life of the local areas.

The origin of the *sabhā* is not clearly known. But it may be noted that in its origin and constitution it differed from the *ūr*. The *sabhā* appears to have obtained in *Brahmadeya* villages where the proprietors of the soil were exclusively Brahmans while the *ūr* was an assembly of the village in which the proprietors of the land were not exclusively Brahmans. Regarding the constitution of the latter we have only very little knowledge; but of the constitution and working of the *sabhā* we have detailed information in the inscriptions of the period. With regard to the origin of the *sabhā*, it appears, it bore some relation to the question of land tenures. The *sabhā* represented the joint body of the proprietors of the soil, who owned the lands of the village in common on a joint tenure; and it was as the representative of that joint body that it transacted the business of the village. Here may be examined the significance of the terms *gaṇabhogam* and *ekabhogam* so often met with in the epigraphs of the period. The former term indicates that lands were held jointly by the people and under a joint tenure, while the latter indicates that the lands were held by one person with absolute and unlimited right over the soil. Harihara II for instance made a grant of twenty-two villages to some Brahmans to be held by them jointly (*gaṇabhogam*).[75] Here no single member among the donees could deal with the lands independently of the others. But the proprietorship of a person under the *ekabhogam* tenure was different, for he held unlimited right over the land; he could sell, make a gift of it or dispose it in any manner he pleased. In S'. 1451 for instance Acyuta Rāya made a grant of the village of Kaḍalāḍi to one Rāmacandra Dīkṣita as a *sarvamānya* to be enjoyed by him and his descendants on

75. J.B.B.R.A.S., XII, p. 357, l. 120.

ekabhogam tenure.[76] He had the right to deal with the land in any manner he pleased.

There were different types of joint ownership.

1. The first was complete and unlimited ownership of the soil by the community. In this system the members of the joint community contributed labour for cultivation in proportion to their share of the land and divided the produce among themselves in the same proportion.

2. According to the second type a particular part of the village was held in common by the people, while the other parts were held by them individually. Regarding the cultivation of the land held in common by them, the former system was followed.

3. The third type of ownership was the one according to which the lands in the village were divided into three classes, good, middling and bad[77] and every member of the joint community was given a portion of each of the three classes subject to a periodical redistribution. This system is still known as the *karaiyīḍu* in the Tanjore district.[77a]

As the members of the village joint community increased in numbers, a body to represent their joint interests and act on behalf of the joint community became an increasing necessity. This need was met by the *sabhā*, which appears to have been a feature of the *gaṇabhogam* or *samudāyam* villages, and had its origin in the communal character of the villages.

The *sabhā* or village assembly had, besides administrative duties, also some economic functions to perform. It had the right of disposing of or acquiring lands on behalf of the village community.[78] The *sabhā* collected the taxes of the government and paid them over to the treasury. Remission of

76. E.I., xiv, p. 313; see also E.C. xi, Hk. 94.
77. E.C., iii, Sr. 64.
77a. *Ind. Ant.*, III, pp. 65-9.
78. 358 and 389 of 1923; 509 of 1925.

taxes or their assignment for the expenses of a temple or the imposition of fresh ones were usually communicated by the government to the *sabhā* which made the necessary entries in the account books and carried out the orders.[79] Likewise, whenever a change was made in the method of collection of the taxes the *sabhā*, if it was entrusted with the work of collection, was intimated of the same.[80] Thus it exercised great influence over the taxation policy of the government, and usually was consulted with regard to taxation.[81] Besides, the *sabhā* levied and collected taxes of a local character to be spent for local purposes. It enjoyed some judicial powers and tried certain types of cases. Occasionally it confiscated the lands of people for offences.[82] In a few cases the temples were controlled by the village assemblies; but it was not unusual for the village assemblies to enjoy certain rights such as the control of public places along with the temple authorities.[83] They acted sometimes as guardians of public endowments and charities. At times money was deposited with the assemblies for a specific purpose as for instance feeding Brahmans, versed in the Vedas.[84] The assemblies also acted as trustees for the proper cultivation of land, set apart for meeting the expenses of worship in a temple.[85]

Section **4**

Professional Associations And Guilds

A very important feature of the economic organisation of the town was the constitution of a guild. It was usually a community of interest that brought into existence the guild; and its members were anxious to promote their common interests. Every guild was a local organisation,

79. *Inscriptions of the Pudukkottai State*, No. 699.
80. 259 of 1917.
81. 681 of 1922; *Rep.*, 1923, para 83.
82. 509 of 1925.
83. 262 of 1927-28.
84. 470 of 1925; 469 of 1925.
85. *M.A.R.*, 1924, para 51.

though occasionally there were also extraterritorial ones. Another striking feature of the guild system was the fact that its members belonged to a religious sect. This adherence to a particular religious creed was a great unifying factor in the mediaeval guild organisation.

According to contemporary evidence there were two kinds of guilds, the craft-guild and the merchant-guild. The former was a professional association, based on the caste system. Each group of workmen, following a particular profession and belonging to a community, formed a guild. Thus, heredity formed a notable part in it; an artisan's son was usually an artisan. But if a member of a community should change his profession and take to the profession of some other community then he became a member of the guild of the latter community. Thus, as Sir George Birdwood remarks, "the trade guilds of the great polytechnical sites of India are not, however, always exactly coincident with the sectarian or technical caste of a particular class of artisans. Sometimes the same trade is pursued by men of different castes, and its guild generally includes every member of the trade it represents without strict reference to caste."[86] Thus though caste was a great unifying factor in the formation of guilds the sameness of occupation of the members was of equal importance. It is possible that no one might carry on a trade in an urban area unless he was identified with the guild maintained by his fellow craftsmen. The objects of the organisation of the guilds were the securing and maintaining for their members equality of opportunity and a good basis of subsistence through the restiction or exclusion of competition.

Among the important craft-guilds were those of the Vīra Pāñcālas (who, as has been said earlier, consisted of the goldsmiths, blacksmiths, brass-smiths, carpenters and idol-makers), weavers, potters, cloth dyers, oil millers, shoe makers (?) tailors, shepherds, cowherds, hunters, washermen,

86. *Industrial Arts of India*, p. 138; see also Coomaraswamy, *The Indian Craftsman*, p. 67 and K.R.R. Sastry, *South Indian Guilds*, pp. 6-32

barbers and a few others.[87] It appears that there were atleast eighteen such groups, *paṇas*, in the Empire. The *Āmuktamālyada* refers to the guilds of weavers, goldsmiths, weavers of silk-cloth, Komaṭis, Vaijātis, gunny-bag makers, basket-makers, etc.[88] Besides, there was a guild of the manufacturers of salt (*upparavu*).[89]

We do not have sufficient information about the organisation and working of the craft guilds; but the following details may be noted. There was much discipline among their members as is borne out by the closing words of an epigraph which says that whosoever destroyed a particular grant was to be put out of the *Pāñcālas*, his trade, his assembly and the *nāḍ*.[90] With this may be compared what has been said of the guilds of Ahmadabad though of a later date. There it is said: "The decisions of the gilds are enforced by fines. If the offender refuses to pay, and all members of the gild belong to one caste, the offender is put out of caste. If the gild contains men of different castes, the gild uses its influence with other gilds to prevent the recusant member from getting work."[91] They acted as a body with the government and secured rights and privileges for their coummunity. Wherever they existed they were consulted by the government in their taxation policy. Likewise they acted jointly in making collections of dues from their members and utilised the same for making gift to temples or public institutions.[92] The rate and manner of the levy of the dues might have differed from place to place. The members of the crafts lived in particular streets, in which they carried on their professions.[93] It is reasonable to believe however that the area over which the organisation of the guild extended was at times greater

87. E. I., xx, p. 90.
88. Canto iv, v. 35.
89. EC xi Mk. 8, 9; iv, YI.2.
90. *E. C.*, iv, Gp. 34.
91. *Imperial Gazetteer*, V. p. 190; A. Appadorai, *Economic Conditions in Southern India (1000-1500 A. D.)*, I, p 378.
92. E. C., iv, Ch. 110.
93. Elliot, *op. cit.*, IV, p. 107.

than the limited area of the town or country, in which the members of the guild lived. The guild of one place exercised influence over the guild of other places. For instance the weavers of Kāñcipuram and Viriñcipuram enjoyed the right of using *sangu* and *daṇḍu* while those of some other places had not that privilege. Therefore, on representation to the authorities, the same privilege was granted to the latter.[94]

Perhaps more important than the craft guilds were the merchant guilds, which played a very conspicuous part in the commercial life of the country. It appears there were different groups of people engaged in trade, which made them organise into different guilds in the Empire. They were known by different names such as *Ubhaya nānādēs'i* and those of the fifty-six countries[95] *Vīrabaṇajigas*,[96] the *Vais'ya-vāṇiya nagarattār*,[97] the *Kaḍai-kūṭṭutānattār*,[98] the *Nagarattār*,[99] *Ayyavole*,[100] *Ayyavole sālumūlas* of the fifty-six countries etc. Many of these names occur in the inscriptions found in different parts of the Empire which show that the merchant guilds were known by such different names.

We do not have much information about the *Nānādēs'is*. There appear to have been two sects among them whose 'mother-home' was Ais'varyapura[101] from which place they migrated to different parts of the country. The *Vīra Baṇajigas* constituted an important mercantile corporation in the Karṇāṭaka districts, and it appears that it was from that name that the modern term *Banyan* has been derived.[102]

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94. 162 of 1918, 473 of 1921, 291, of 1928--29, *Rep.*, 1929, para 92; 422 of 1925, etc.

95. 679 of 1922; E. C. iv, Yl. 61; E. C. v, Ak. 68: E. C. vii, Sk. 313.

96. 275 of 1905; E. C. v, Bl. 75.

97. E. C., ix, Hk. 50; 405 to 1912; 442 of 1906.

98. 47 of 1887; S. I. I.. iv, 47.

99. 51 of 1916

100. 18 of 1910; 377 of 1911.

101. E. C., viii. Sa 60; *ubhaya nānā desigale tavarmmaney ada Aivarapa pura varādhiśvara*, (text.)

102. Warmington, *Ancient Commerce of India*, p. 14.

Dr. Barnett says about them: "There was a vast organisation of associated traders which about the twelfth and thirteenth centuries had spread a net work over the greater part of southern India and Ceylon, and perhaps even further, and which beginning with simple commerce and then developing an elaborate social and semi military system strikingly recalls our East India Company. There were the *Vīrā baṇajus* as they were called in Kanarese or *Vīra Valañjigar* as they were styled in Tamil. The name signifies 'valiant merchants' and is therefore similar to our 'gentlemen adventurers'......They claimed to have come originally from Ahicchattra, but their central body was at Ayyavole, the modern Aihole, which was the seat of their Board of Directors consisting of a Council of 500 members."[103] It is equally possible that there were fivehundred edicts or rules regulating the organisation and woking of the guild.

Dr. Fleet thinks that "*Balañja* is another from of *baṇañja* or *baṇañju* the modern *baṇañjiga*, *baṇajiga* or *baṇijiga* which must be the original or a corruption of the Sanskrit *baṇija*, *beṇijika*, merchant, trader. *Baṇajiga* is a division of the Lingayats, and *Vīrabaṇajiga* or in old Canarese *Vīravaṇiga* means a strict *Baṇajiga*.[104] They took such titles as *Nakhara parivāra* and *Mummuridaṇḍa*.[104a] The centres where their organisation flourished were Vijayanagar, Hastināvati, Dorasamudra, Gutti, Penugoṇḍa, Āḍavāni, Udayagiri, Candragiri, Muluvāy, Kāñci, Paḍaivīḍu, Caturangapaṭṭaṇam, Mangaḷūru Honnāvuru, Candavūru, Āraga, Candragutti, Annigere, Huligere, Niḍugallu, Cimatanagallu, Tariyakallu, Anevidda, Sari, Kalheya, Telakaḷāmbi (Terakanambi) and S'ingapaṭṭaṇa.[105]

About the *Vais'yavāṇiya Nagarattār* we have very little information. They appear to have been a Tamilian

103. *The Ancient Tamil Township and Village*, p. 42 (MS) quoted by Dr. B. A. Saletore in his *Social and Political Life in the Vijayanagara Empire*, Vol. II, p. 98 *fn.*

104. *Int. Ant.*, V, p. 344 *fn.*

104a E. c., v, Bl 75.

105. E. C., v, Bl. 75.

organisation in some parts of the empire.[106] The *Kaḍaikūṭṭu tāṉattār* appear to have likewise constituted a guild in certain places.

There were a few factors which helped the formation of such mercantile guilds. The first was trade in common articles. Ábdur Razzāk says that the tradesmen of each separate guild or craft had their shops close to one another and that the jewellers sold their rubies, pearls and diamonds openly in the bazaars.[107] Paes gives expression to the same practice.[108] As said above adherence to the same religion was a great unifying factor in the organisation of these guilds, as in contemporary Europe; and we see for instance that the *Vīra Baṇajigas* in the Karṇāṭaka districts of the Empire were Lingayats. The merchants traced their descent from a common ancestor as from Kubēra or Vāsudēva which went a long way to maintain their bonds of close relationship and cooperation. But "the gilds were not like modern 'trusts', for in the first place, their membership was very broad, and in the second, they were associations of men, not of capital, and there was no division of profits among the members." They existed primarily for the regulation and protection of trade which was carried on by its members individually, though, they as a corporate body did commercial transactions in common.

The guilds were also known as *Nagarattārs* or *Ceṭṭis*. They had each a leader who exercised some control over the working of the organisation and was known in the Kanarese and Telugu districts as the *Paṭṭaṇasvāmi* or *Ceṭṭi*. We do not know however how he was made the leader, but it appears certain that he was recognised as leader of the mercantile guild and in some cases at least, was in charge of the administration of the municipal or urban areas in which it existed. Whenever the *Paṭṭaṇasvāmi* or *Pṛtvīsceṭṭi*

106. 442 of 1906.
107. Elliot, *op. cit.*, IV, p. 107.
108. Sewell, *op. cit.*, pp. 255-6.

went to a place outside his jurisdiction, he was treated with marked courtesy and honour. An epigraph states that he was to be presented with betel leaf, and given dress and allowance of food by the authorities of the country. The inscription further records that the *Paṭṭaṇasvāmi* was granted the customs duties "on the roads both ways".[109] Whenever the guild began to do an important act it is stated to to have placed the diamond *bayisange* or *vaisanige* on the ground as a mark of great respect and reverence.[110] With our present knowledge of the officers of the guild, we are not able to say who the *Vadda vyavahāri* or the senior merchant was or in what relation he stood to the *Paṭṭaṇasvāmi* if he was different from him. But it is certain that both had much to do with the institution of fairs in the local areas for which they received *mānyas* of land.[111] Another important dignitary in the guild was the *Mahāprabhu*.[112]

Originally the merchant guilds appear to have been private organisations; but gradually they gained public recognition. These guilds exercised powerful influence over the royal court. It was not unusual for them to make petition to the government to do a particular thing and it was done. Thus, when the great *Vadda byavahāri* chief of both sects of *Nānādēsis* made petition to Bukkaṇṇa Vōḍayār requesting him to do a particular thing, it was done.[113] The government sought their approval in their taxation policy. When for instance one Abbarāja Timmappa, the agent of Pradhāna Tirumalarāja, granted the *mūlavisa* of certain villages for the offerings to the God in a temple, he did so with the consent of the *S'eṭṭi Paṭṭaṇasvāmis* (presiding merchants) of the villages and the *Mahānāḍu* (general assembly.)[114] Likewise, Kampadēva Anna an officer under Acyuta

109. E. C. xii, Ck. 76.
110. E. C., v, Bl. 75.
111. E. C., x, Ct. 95; also Bp. 72; ix, An. 44.
112. E. C., x, Kl. 73.
113. E. C., v, Ak. 68.
114. 681 of 1922; *Rep.*, 1923 para 83.

Rāya made a gift of some duties on crops and of the fee on marriages with the consent of the *Nānādēs'i* merchants.[115] The guilds enjoyed certain powers of local taxation and they spent the collected taxes on some good purpose. According to an inscription of 1534 A.D. the merchants of a particular place collected tolls at the market held every Sunday in the hamlet of Vis'vēs'varadēvapura belonging to Lepākṣi in the Harināḍu and Hosūrunāḍu and a few other customs and granted them to a temple.[116] They at times got taxes remitted by the government.[117]

The guilds enjoyed the right to confer honours on persons of position. Thus the members of the *Nakhara Parivāra* and *Mummuridaṇḍa* "together with their three hundred Billa dependents and with the collection of the Holeyas of Vijayanagar having placed the diamond *vaisanige* in the presence of the holy lotus feet of God Virūpākṣa, and sitting down, having agreed among themselves conferred the mayoralty of the earth (*pṛthvīs'eṭṭitana*) on Muddayya Daṇṇāyaka who was the officer for superintendence of the customs of our fifty-six countries."[118] They also enjoyed the privilege of making regulations of a social character for their members. A number of *Ceṭṭis* at Bāgūr for instance made some regulations in 1449 A.D. (?) regarding the women who lapsed from marriage. But unfortunately the inscription regarding this is fragmentary and hence we are not able to know what the regulations were.[119]

Thus it appears certain that there was no field of activity, political, economic and social, in which the guilds did not make their influence felt. But the knowledge we have of them is still meagre and hence we are not able to know about their organisation and working in greater detail

115. 679 of 1922; *Rep.* 1923, para 83.
116. 570 of 1912.
117. MAR, 1917, para 48.
118. E. C., v, Bl. 75.
119. E. C., xii, Tp. 86.

Section 5

The Temple

Another institution that played an important part in the economic life of the people was the temple. Besides being an important centre of the religious activities and life of the people the temple in mediaeval India had certain secular functions. The temple was a wealthy institution on which depended a large number of persons belonging to different professions; it was a landlord, engaged labour and cultivated lands, besides encouraging rural activities like extension of cultivation and rehabilitation of villages. It was a huge consumer and purchased various articles for purposes of carrying on worship in temple. The temple treasury was a bank, lending money to the people during times of need. It was a great promoter of rural industries like handicrafts and afforded employment to the poor.

The wealth of the South Indian temple was a great wonder to the foreign travellers that came to the country. In 1310 Malik Kafur carried away spoils from many South Indian temples amounting to 96,000 *mans*, estimated at a hundred million sterling of English money.[120] Barbosa was struck by the wealth of the temples.[121] Such wealth was made up of royal benefaction and the benefactions made by the public. The endowments made to them were usually known as *devadāya or devadāna* lands. The kings patronised the temples by either making grants of lands to them tax-free or at low quit rent to be enjoyed by them in perpetuity or by making over to them specified taxes payable to the government by the people of the area in which the temples were situated. Besides, endowments were made to them for particular purposes, as for the repair of a portion of the temple or the institution of a service in the name of the donor. In 1391 for instance an endowment was made

120. Sewell, *op. cit.*, pp. 402-03.
121. *Barbosa*, I, pp. 115 and 196.

for the provisionof *tulasi* leaves to a temple.[122] Numerous articles of jewellery were presented to them or in a number of cases provision was made for some service by the dedication of cows and sheep, the income from which was utilised for the expenses of the service, for which the dedication was made. Likewise, flower gardens or *nandavanams* were granted to temples. A typical *sarvamānya* grant to a temple shows us the absolute ownership it could exercise on the land. An epigraph records for instance the grant of a village, Māḍambākkam, to the temple of S'ērvai Āḷuḍaiya Nāyaṉār. It states: "This village, the whole village which is the sacred holding of this God, limited by its four boundaries, including the village waste, wet lands, and garden lands with all its limitations of communal obligations, fees on cotton looms, obligations for the maintenance of oil mills, etc., fees for maintaining village servants and other similar obligations new or old, which may hereafter become due from each tenant in order that it may last till the Sun and Moon exist".[123] Kṛṣṇadēva Rāya remitted ten thousand *varāhas*, the income from different items of revenue such as the *jōdi*, *aras'upēṟu* and *s'ūlavari* in favour of a large number of S'iva and Viṣṇu temple in the Cōḷamaṇḍalam.[124] The temples were allowed to collect the taxes for their maintenance and repair. Likewise Dēva Rāya II issued an order (*nirūpa*) to one S'rigirinātha of Candragiri asking him to remit the *jōḍi* of 131 *poṉs* and 6¼ *paṇams* or 13, 16¼ *paṇams* at ten *paṇams* per *poṉ* due to the Candragiri rājya for the utilisation of the amount for the temple of Porēṟṟu Perumāḷ of the place.[125]

From the economic point of view the temple was a big landlord owning vast properties in land, got by gifts made by pious individuals and by purchases made by the trustees with the surplus funds available. The temple cultivated

122. 267 of 1899.

123. 321 of 1911; *Rep.* 1912, para 49.

124. 74 of 1903, 125 of 1904, 511 of 1905, 355 of 1907, 167 of 1925, 124 of 1926; see E. I., xx, pp. 1-13.

125. MER, 1916, *Rep.*; para 60.

the lands with the help of tenants whose interests from outside encroachment it protected. Thus when the officers of Dēva Rāya II oppressed the tenants of the temple of Tiruvoṟṟiyūr by the imposition of taxes like *jōḍi*, *mugam-pārvai*, *angasālai*, *sambādam*, *visēṣādāyam* and by the introduction of the lease system to be adopted by the temple, the trustees complained of the same to the king, who ordered that the above taxes together with the *arisikāṇam*, good bull, good cow, *veṭṭi*, and *kaṭṭayam* should thereafter be collected by the *mahesvaras* of the temple and that the leased lands already paid for, be redeemed by money received from the royal treasury.[126]

The temples played an important part in the reclamation of waste lands and the extension of cultivation. The treasury of Tirumaḷisai Āḻvār purchased as *ulavukāṇi* two pieces of land which were in the possession of the temple at Paḍaipaṟṟu *alias* Tēpperumāḷnallūr. The lands were till then uncultivated on account of their non-irrigable high level. They were soon reclaimed and brought under cultivation and leased out for two hundred *paṇams* per year.[127] Likewise the temples encouraged the affording of irrigation facilities to the people. An epigraph of 1412 A. D. states for instance that the *sthānikas* of the Kurundamale temple (Kolar District) granted to one Timmaṇṇa, a *dharmasāsana* for a deed of sale in connection with the construction of a tank named *Sidhasamudra*.[128] When a tank had breached at Tirupanangāḍu in the North Arcot district and the lands under the tank remained uncultivated because the people of the place were not able to meet the expenses of the repair of the tank, the authorities of the local temple sold some of the temple lands to meet the expenses of the repair.[129] The temples encouraged outside effort in the matter of reclamation, and when such effort helped the

126. 226 of 1913; *Rep.*, 1913 para 54.
127. 258 of 1919.
128. E. C., x, Mb. 259.
129. 251 of 1906; see also 241 of 1906; *Rep.*, 1907, para 53.

upkeep of the temple by augmenting its resources and income, it conferred honours on such individuals by appointing them to offices of importance in the temple and gave them temple honours like sacred cloth, *parivaṭṭam*, *tīrtha*, the sacred ashes, etc.[130]

The trustees of the temple enjoyed the right to mortgage the temple lands. But very often it proved disadvantageous and detrimental to the charities intended by the original donors. Therefore one Sidha Rāmappa Nāyaka, a subordinate of S'rī Ranga III, issued an order that the *kāpus*, who had held any temple or Brahman lands on "mortgage by possession" (*bhoga āyakam*) should restore the lands to the original owners after twelve years of enjoyment, without demanding any money from them, giving them at the same time written deeds (*bhogapatra*) recording the reconveyance. The order was issued to the *Reḍḍis*, *Karṇams* and the other people of the place. "The legislation appears evidently to have been made as a remedy against the conveyance by the owners of these lands for long periods to the *Kāpus* in consideration of the loans paid on such usufructory mortgages decidedly favourable to the mortgagee.[131] A little earlier one Koneṭi Ayyan, the great men of Madurantakam and the treasurers of the temple at Cintāmaṇi in the South Arcot district, made an agreement among themselves that the *devadāna* lands which had recently been released from mortgage during the regime of Koneṭi Ayyangar must not be mortgaged under any circumstance.[132]

For the worship carried on in the temple, many articles were in demand and among them were cocoanut, sandal, rice, turmeric, incense, leaves, flowers, lights, ghee, salt, pepper, arecanut and betel, besides oil, mustard, pulse, sugar, plantains, curds and camphor.[133]

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130. 270 of 1916, 51 of 1916; *Rep.*, para 73 and 81.
131. 691 of 1917; *Rep.*, 1918, para 77.
132. 408 of 1922.
133. E. C., iv, Gp. 85.

In a large number of cases the temple treasury served as a bank and lent money to the people when they were badly in need of it. According to an inscription of about A. D. 1372 the Brahmans of a certain village made an agreement among themselves with regard to a loan of one hundred and fifty *gadyāṇas* to be given to their ryots from the treasury of God Rāmanātha of the place.[134] When the temple authorities were not able to realise the amount they had lent, they purchased the lands of the debtor to the extent necessary to get back the amount. An epigraph at S'ēvalūr in the former Pudukkottai State records that the authorities of the temple at Tirubhūmis'am Uḍaiya Nāyanār had lent three-hundred *s'akkara paṇams* to the *ūravar* of Tēnēru Vaḍaparru who had taken the amount for the payment of *kāṇikkai*. They were not able to pay back the money they had borrowed and hence sold away some of their lands to the temple.[135] Likewise the temple treasury of Tiruvarangulam, also in the Pudukkottai area had lent money to the residents and owners of *pāḍikāval* right in three villages for paying off certain dues which they were otherwise unable to pay when demanded by Svāmi Narasā Nāyakkar. The residents and owners of *pāḍikāval* rights were not able to pay back the loan and hence sold some of their lands to the temple authorities to wipe off the debt.[136]

The temple was one of the institutions that provided work for a good number of persons and maintained them. Ábdur Razzāk bears testimony to the people in the village of Bidrur having enjoyed pensions and allowances from the temple at the place.[137] The management of the temple was in the hands of either an invidual or a group of persons known as *sthānattār* who administered the temple properties, controlled the temple servants and carefully guarded the

134. E. C., iv, Gp. 33.
135. I. P S. 237.
136. *Ibid.*, 733
137. Elliot, *op. cit.*, IV, p. 105.

interests of the temple. Among the servants of the temple were the *kōyilkēlvi* (generally manager of the temple) and the *kōyilkaṇakku* or *ōlailuttu* (temple accountant)[138], *mey-kāval* (general watchmnn)[139], *arai kaval* (superintendent of stores), *poṉbaṇḍḍāram* (treasurer), *tiruvilakkukkuḍi* (servants in charge of lighting)[140], and the temple priest. Among the other employees were the pipers, drummers, singers, conch-blowers, parasol-bearers, gardeners and many others about whom however we have no detailed contemporary description. A record at S'rīmuṣṇam mentions the provision of twelve musicians and 360 servants for the temple at the place.[141] Besides, to each temple were attached a large number of dancing girls whose duty was to dance and sing before the Gods in the mornings and evenings and at the time when offerings were made to them. The temples also employed Brahmans to recite some religious literature like the Vedas and Purāṇas in the shrines. They also appear to have maintained hospitals.[142] The offices were usually hereditary and in cases where more than one person advanced their claim to an office, it was decided by a *sabhā*.[143] A Cōḷa inscription may be read here with interest, for it shows the principle followed for appointments to offices in temples, particularly those of a technical nature. In the order of appointment recorded by the epigraph is stated: " Instead of those among these persons, who would die or emigrate, the nearest relations of such persons were to receive that paddy and to recite the *Tiruppadiyam*. If the nearest relations of such persons were not qualified themselves, they were to select (other) qualified persons, to let (these) recite the *Tiruppadiyam* and to receive that paddy. If there were no near relations to such persons, the (other) incumbents to such appoint-

138. 415. of 1912; T. T. D. I, ii, No. 219.
139. 299 of 1912.
140. 374 of 1912.
141. 270 of 1916; *Rep.*, para 73
142. E. I., xxiv, p. 90.
143. 576 of 1916.

ments were to select qualified persons for reciting the *Tiruppadiyam*. and the person selected was to receive the paddy in the same way, as that person (whom he represented) had received it".[144] They were all remunerated either by grants of land on terms of beneficial service or they were allowed a share of the income of the temple.[145] In cases where lands were granted to the servants as remuneration for their services, they were strictly prohibited from selling or mortgaging them on any account. A record at Tiruppukkuḻi in the Chingleput district registers that the lands concerned, which were service *ināms*, were neither to be sold nor mortgaged by the parties who received them and specifies tbat if they sold or mortgaged the lands, they would suffer the punishment that traitors to the king and to the community would suffer and in addition, would be liable to a fine imposed by the officers of the temple treasury.[146] Usually they were provided each with a house. According to a group of inscriptions at Tiruppuḍamarudūr one Rāmanātha was appointed poet of the temple at the place and granted certain lands and a house tax-free.[147] Food was also supplied to many servants in the temple.

An important aspect of the activities of the temples in the economic sphere was the encouragement they gave to small industries, particularly weaving. The authorities of the temple at Perunagar in the Chingleput district sold for instance twenty grounds of land in its *tirumaḍai viḻāgam* which had been lying waste since the days of S'ambuvarāya to some weavers for their settlements, the proceeds to be utilised for repairs and ornament.[148] Another epigraph in the same place states that they reduced certain taxes such as *adhikāri kāṇikkai, kaṭṭiyai* and *mocai* due from the weavers of the place as a concession for their resettlement

144. S. I. I., ii, p. 256.
145. T. T. D. I., Nos. 199-202.
146. 193 of 1916; *Rep.*, para 60.
147. 412, 413 and 421 of 1916.
148. 368 of 1923.

in their original possessions which they had left without paying their dues.[149] An equally interesting record at Manampādi registers the lease deed (*aḍaiōlai*) given to the weavers to settle in a street on the temple land of Vāṉavasundara Nāyaṉār on certain conditions regarding taxes due from them to the temple.[150]

Thus the services rendered by the temple to the economic well-being of the country were many. Even poor relief in some form was afforded by it.

149. 370 of 1923.
150. 381 of 1923.

CHAPTER II

AGRICULTURE AND LAND TENURES

Section 1

Articles of Agricultural Production

Among the industries in India, by far the most important is agriculture. Considering the present position of agriculture and its organisation it may be said that it was and will continue to be, the most important single industry in the country employing the greater portion of the Indian population. At the present day about seventy-five per cent of the population depend on agriculture for their liveli hood. On the prosperity of the agricultural industry depend various things. The important Indian manufactures largely depend on large agricultural production; the purchasing power of the people depends on it; the Indian trade, both export and import, depends on it; and finally the soundness of the finances of the Government of India largely depends on agricultural prosperity.

Among the agents of production, land is the most important. We are not able to know clearly the area of land under cultivation in the Vijayanagar period. But from the evidence of the observations of the foreign travellers who visited the country and the provenance of inscriptions bearing on the question, we may assume that though a good part of the country had been brought under cultivation, there were still large tracts of territory covered by dense jungles and rocky hills with barren soil, that had not been converted into agricultural areas. It appears that the extent of land under agriculture was not as much as it is at the present day. However, the available evidence shows that the land under cultivation in South India in the Vijayanagar days was usually very fertile, capable of

giving abundant crops. According to Ábdur Razzāk, in Vijayanagar "most of the land was well tilled and fertile."[1] Nikitin remarks that the land was laid out into fields and the ground well tilled.[2] Duarte Barbosa observes that the kingdom of Narasinga was very rich and well supplied with provisions, and all the country was very fertile and brought under cultivation[3] and adds that it was "the best supplied of all the lands in this part of India, saving only Cambaya."[4] This same fact is echoed by Paes who observes that the dominions (the Vijayanagar Empire) were "very well cultivated and very fertile."[5] This impression is confirmed by the inscriptions of the period which refer to the rearing of two or three crops on a piece of land which could not have been possible unless it was fertile and had ample irrigation facilities. They are the *kār*, *pas'ānam* and *kaḍaippū*. In the Kannaḍa districts a piece of land capable of yielding one crop annully was known as *beṭṭu*.[6] In certain areas, however, land appears to have been not very fertile, the soil being "poor and far from good for tilling."[7] We also learn of the classifications of land into good, middling and bad.[8]

Though we get valuable information about many agricultural crops that were grown in the Empire we do not have sufficient reliable data as to the kinds of crops that were raised in particular areas. While the foreign travellers who visited the Empire, do give useful information about the different crops raised, their records are not definite as to the particular crops that were raised in particular areas, or the extent of their cultivation. The epigraphs of the period also only refer to the kinds of crops raised on which a certain

1. Elliot, *History of India*, IV, p. 105.
2. Major, *India in the Fifteenth Century*, pp. 10 and 20.
3. *Barbosa*, I, pp. 166 and 175.
4. *Ibid.*, I, p. 125.
5. Sewell, *op. cit.*, p. 237.
6. CP. 8 of 1921–22.
7. *Tao i chih lio* Rockhill, *Notes*, *T'oung Pao* xvi, pp. 453, 462 and 463.
8. E. C., x, Mb. 172.

rate of tax was levied. The following details may however be noted.

Rice

Rice being the staple food of the people, it was the principal crop grown and that on a large scale. While white rice was consumed by the richer classes, red rice (black rice according to Barbosa) was consumed by the poorer classes. Barbosa says that the latter was better and more wholesome than the white.[9] Among the kinds of rice cultivated he mentions *girasal, asal, auaragas* and *paccar*,[10] while the epigraphs of the period add *kuruvai*. Rice, being a typical monsoon crop, appears to have been cultivated in different parts of the Empire where facilities for the same were available. The Coromandel coast including the area about Pulicat specialised in abundant rice cultivation, largely because of the fertility of the soil and the irrigation facilities available in the area.[11] The lands on the sides of the route from Bhatkal to Vijayanagar through Honavar and Bankāpūr were well cultivated with plenty of rice.[13] According to Barbosa, the Canara coast contained many farm-steads where much rice was grown and exported to Malabar and Ormuz.[13]

Cereals

The cereals, such as wheat, barley, *varagu* and *tinai* occupied the second place of importance in agriculture, as they continue to do even today. Wheat according to Barbosa was grown on the Coromandel coast only on a small scale while much was produced in Gujarat and the area round Dābūl.[14] It was not so common as the other grains,

9. *Barbosa*, I, pp. 195-96.
10. *Ibid.*, I, p. 192.
11. Jones, *Varthema*, p. 195; *Barbosa*, II, p. 125; Sewell, *op. cit.*, p. 366.
12. Sewell, *op. cit.*, p. 237.
13. *Barbosa*, I, pp. 185, 188 and 184.
14. *Barbosa*, I, pp. 155, 165; and II, p. 125.

since no one ate it except the Moors (Muslims).[15] Millet or Jowar which Paes calls 'Indian Corn' was also produced on some scale in the country.[16] The inscriptions of the period make a difference between the great millet and the ordinary millet.[17] Next to these, pulses were produced, and among them were green gram, black-gram, Bengal-gram, horse gram, red-gram, black pulse and beans.[18] According to Paes the grains were produced in great quantity because, besides being used as food for men, they were also used for horses since there was no other kind of barley.[19] Sugarcane, the economic importance of which was great, was grown wherever water was available and the soil was suitable. The canes were usually cut in summer.[20] It is possible there were two kinds of sugar cane, the common variety and the thick one. Among the oilseeds that were grown may be mentioned gingelly, sesamum and castor.[21] The important fibres, that were produced, were hemp and cotton. The latter appears to have been cultivated on a large scale in the middle country where the red soil must have yielded a good harvest.[22] Among the dyes, indigo was cultivated in the west coast.[23] The others were cinnabar, myrobalan and sandal wood.[24]

Spices

Spices were produced, both for consumption within and export to foreign countries. They were very often used with food as is being done even today. The most important of the spices produced in the country was pepper, particularly black pepper. Even here there appear to have been two

15. Sewell, *op. cit.*, p. 237.
16. *Ibid.*; E. I. vi, p. 232.
17. E. I. vi, p. 232.
18. Major, *India in the Fifteenth Century*, p. 10; *Barbosa*, I, p. 200 E. C. iii, Ml. 95; v, Cn. 174.
19. Sewell, *op. cit.*, p. 237.
20. *Āmukta.*, II, v. 70;. See also Gribble: *A History of the Deccan*, I, p. 85.
21. Sewell, *op, cit.*, p. 386; E. I., vi, p. 232.
22. Sewell. *op. cit.*, p. 386; E. I., vi, p. 232.
23. Major, *India in the Fifteenth Century*, p. 19.
24. E. I., vi, p. 232 ;*Barbosa*, I, pp. 188-89.

varieties in it, the ordinary pepper and the long pepper.[25] Cinnamon, cloves, and ginger were also among the important spices produced in the country. Of ginger, there were two varieties, the green and the dried. Some of the other spices that were produced in the Empire were cardamon, nutmeg, mace, mustard, incense and aloes. They were largely produced in the west coast and exported to foreign countries where they were in great demand.[26]

Garden Produce

Besides these, there were produced in the Empire many kinds of garden crops consisting of vegetables and fruits. Paes says that the country was filled with groves of fruit trees, on account of which abundant fruits were available everywehere and they were cheap.[27] The fruit gardens grew "so closely to one another" that, to Paes, they appeared to be a thick forest.[28] Among the fruits cultivated in the country were the bread-fruit, plantain, fig, citron, grapes, mango, orange, lime, lemon, pomegranate, jack fruits, cucumber, and many others.[29] Paes says that there were plantations of mangoes, jack-fruit trees, tamarinds, and other very large trees behind the cities, towns and villages and formed resting places for merchants to halt with their merchandise.[30] At Vijayanagar itself, as a result of the provision for the supply of fresh water to the city by Kṛṣṇadēva Rāya big gardens, orchards and vineyards were made where plantations of lemons, oranges and roses were grown.[31] Besides these products, there were two more important ones, the cocoanut and the betel. The former, generally known to the foreign travellers as the

25. E. I., vi, p. 232.

26. *Barbosa*, I, p. 203; II, p. 215; Rockhill, Notes, *T' oungpao*, xvi, p. 452; Major, *India in the Fifteenth Century*, p. 6; E. I., vi, pp. 232-33.

27. Sewell, *op. cit.*, p. 375.

28. *Ibid.*, pp. 256-57

29. Major, *India in the Fifteenth Century*, pp. 18-19: Sewell, *op. cit.*, pp. 255, 353 and 375; *Varthema*, p. 120; Mahaw, *J.R.A.S.* 1896, p. 347.

30. Sewell, *op. cit.*, p. 238.

31. *Ibid.*, p. 312; see also p. 243.

Indian nut, was grown throughout the coast of India besides Ceylon. It was put to various uses, and helped the existence of many small by-industries in the local areas. Cocoanuts were exported to Aden and other places.[32] Besides, betel was grown in different places and used with arecanut by the people, both male and female.[33] Among other garden crops were the arecanut, gall-nut, brinjals, garlic, onions and turmeric.[34] Flower gardens were kept in the Empire. Flowers were required not only for worship and adorning Gods in temples, but also for use by women. Vijayanagar had a plentiful supply of different kinds of flowers.

The above list of the crops grown in the Vijayanagar Empire shows that almost all the crops that are now raised were raised even then. But to the agricultural products of those days have now been added some commercial and planters' crops, such as tea, coffee, groundnuts, tobacco, potatos, oats and a few others.

Section 2

Irrigation

The economic importance of rain in an agricultural country can hardly be exaggerated. A year of drought means a year of scarcity, if not always of famine; and consecutive years of such drought in large areas mean widespread scarcity and famine. In fact, Government budgets are adversely affected by a year of unfavourable rain. Further in a year of drought or insufficient rain, pools, tanks, etc. dry up in many cases, and the suffering of people from want of drinking water becomes acute. Thus the paramount importance of irrigation in a country like India, throughout the greater part of which rainfall is uncertain, insufficient or unevenly distributed is very great;

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32. *Barbosa*, I, p. 56.
33. Major, *India in the Fifteenth Century*, p. 32; Sewell, *op. cit.*, p. 242.
34. E. I., vi, p. 232.

without proper irrigation, large areas of land in South India would lie permanently waste or could be cultivated only in years of exceptionally favourable rain.

In India provision for the supply of water has been considered to be an act of charity and it is said that, as the water of a tank serves to nurture both moveable and immoveable creation on the earth, even Brahmā is not able to recount the merit accruing from it.[35] The Vijayanagar kings realised the importance of affording irrigation facilities for agricultural improvement. Kṛṣṇadēva Rāya says for instance in his well-known work, the *Āmuktamālyada*, that the extent of a State is the root-cause of its prosperity, and that if it is small its prosperity would increase only when tanks and irrigation canals are constructed and favour is shown to the poor cultivators in the matter of taxation and services.[36] The Vijayanagar sovereigns not only constructed irrigation tanks and canals but also encouraged private initiative in this connection in different ways.

Irrigation works may be divided into three main types, storage works or tank irrigation, river or canal and dam works and well and lift works. In the Vijayanagar days great attention was paid to the storage works, dam or *anicut* works and the digging of wells, since the possibilities for new and large river irrigation were limited. Thus in 1369 A. D. Bhāskara Bavadūra, a prince of the first Vijayanagar dynasty, constructed a huge tank with many sluices in the modern Cuddapah district (one of the famine-stricken areas in the Madras Presidency). It is recorded that a thousand men were employed in the work, a hundred carts were used to get stones for the walls that formed part of the masonry structure and that it took two full years to finish the work. The dam was five hundred *rēkhadaṇḍas* long, eight *rēkhadaṇḍas* wide and seven high. This tank remains even to

35. See E.I., xiv, p. 94.
36. *Āmuktamālyada*, canto iv, v. 236.
37. E. I., xiv, p. 97.

this day in a fairly good condition and use. Under instructions from Bukka II, the master of ten sciences, the hydraulic engineer (*jalasūtra*) S'ingaya Bhaṭṭa led the river Henne through a channel to the S'iruvēra tank at Penugoṇḍa and gave it the name Pratāpa Bukka Rāya Maṇḍala channel.[38] About 1489, during the time of Narasimharāya Mahārāya a valley in the Anantapur district was converted into a tank and named Narasāmbudhi.[39] In 1533 a big tank was formed from the river Ārkkavatī, which, it is interesting to note, still serves as the source of water-supply to the city of Bangalore.[40]

We have a contemporary account in the chronicle of Paes of the construction of a big tank by Kṛṣṇadēva Rāya near his capital to provide irrigation to the fields and to supply water to the new city of Nāgalāpura founded by him. The chronicler says:—

> "The king made a tank there, which as it seems to me, has the width of a falcon shot and it is at the mouth of two hills so that all the water, that comes from either one side or the other, collects there; and besides this, water comes to it from more than three leagues by pipes which run along the lower parts of the range outside. This water is brought from a lake which itself overflows into a little river. The tank has three large pillars handsomely carved with figures; these connect above with certain pipes by which they get water, when they have to irrigate their gardens and rice fields. In order to make this tank, the said king broke down a hill which enclosed the ground occupied by the said tank. In the tank I saw so many people at work that there must have been fifteen

38. E. C., x, Gb 6.
39. 710 of 1917.
40. E. C., ix, Nl. 31.

or twenty thousand men looking like ants so that you cannot see the ground on which they walked, so many there were; this tank the king portioned out among his captains, each of whom had the duty of seeing that the people placed under him did their work and that the tank was finished and brought to completion."[41]

Referring to the construction of the same tank, Nuniz says that the Emperor was assisted in the work by Jao della Ponte, a Portuguese worker in stone, and adds that he made a bank across the middle of the valley so lofty and wide that it was a crossbow-shot in breadth and had large openings. He made many sluices in connection with the tank and constructed many pipes to let out water when necessary. As a result of this great irrigation project many improvements were made in the city and many rice fields and gardens were irrigated. He says that the Emperor failed in the attempt in the initial stages and was told by some that his failure was due to the fact that the Gods were not pleased with him for which the blood of men, women, or buffaloes must be spilt and that therefore he offered a sacrifice of those prisoners in his Empire who deserved death at his hands.[42]

Likewise the officers of Government, private individuals and public bodies undertook the construction of tanks. Rāyasam Koṇḍamarasayya, the minister of Kṛṣṇadēva Rāya, constructed two tanks, the Timmasamudra and Koṇḍasamudra in the Koṇḍaviḍu province.[43] Penugoṇḍa Viraṇṇa, brother of Virūpaṇṇa, the *talāri* of Vijayanagar dug up a spring and irrigation canal called Nūtana Tungabhadrā at the village of Modaya.[44] In 1441 one Mallaṇārya of

41. Sewell, *op. cit.*, pp. 245-46.
42. *Ibid.*, pp. 364-65.
43. 336 of 1915.
44. 68 of 1912.

Udayagiri built a tank at the village of Maṇḍaṉapāti and granted some land for a flower garden.[45] In 1486–87 the residents in and around Tiruvāmāttūr (North Arcot district) sold portions of their lands to the local temple treasury for the purpose of digging a channel from the river leading to the irrigation tank of the village.[46] Likewise wells were dug by private individuals and public bodies in the period.

The state as far as possible encouraged private initiative by making grants to the people or institutions that undertook the work; and such encouragement took the form of either *das'avanda or kaṭṭu kōḍage* grants, according to which the person who undertook or executed the work was given a piece of tax-free land, watered by the tank, canal or well which he constructed. The extent of the grant naturally varied with the importance of the work done by him.

Thus when one Harinidēva Vōḍeyar constructed a tank at a particular place in the Mysore district he was given a grant by Dēva Rāya II and when the tank was extended by him, another grant was made to him.[47] A record of 1497 A. D. in the present Chittore district registers the grant of land as *kaṭṭu kōḍage* at Gundalahalli with certain stipulations about the rate of produce. The gift was by the *sthānika* of a temple to one Narasimhadeva for digging a tank in the village belonging to the Kadiri Lakṣminarasimha temple and for bringing the surrounding lands under cultivation. A portion of the land was given to him as *das'avanda*.[48] In 1513 one Soverya received a *das'avanda* grant in consideration of his having

45. 269 of 1905.
46. 7 of 1922; see also E. C., x, Mb. 259
47. E. C., iii, My. 77.
48. 156 of 1933-34.

constructed a tank.[49] The *Mahājanas* of Bhūpasamudra made a *kōḍage* grant of wet land to a certain person for his having executed some work in connection with the big tank of the village.[50]

Maintenance and repair

The maintenance and repair of irrigation works are as important as their construction. They include among others the proper maintenance of supply channels, removal of deposits from tank sluices and river and spring channels, repair of petty channels, guarding of dams and construction of ring dams at breaches. Great merit was attached to such works by the Hindus; and an inscription of 1413 A.D. states: "a ruined family, a breached tank or pond, a fallen kingdom, whoso restores, or repairs a damaged temple, acquires merit fourfold of that which accrued from them at first."[51] Work in this direction was done in a systematic manner. There is no evidence to show that any cess from the land owners was collected throughout the Empire on a uniform scale to meet the cost of such *kuḍimarāmat* (repairs to irrigation and drainage works which by local custom had to be performed by the joint labour of the village community) in the respective areas. But it must be noted that both the Vijayanagar government and the people were interested in the maintenance of the irrigation and drainage works serving the agricultural tracts in the country, and paid great attention to it. And usually the ryots possessing lands very near the sources of water supply provided the necessary labour at a fixed rate for deepening the river beds or removing the silt, thereby giving rise to the custom of *āḷamañji*.[52]

One of the very common methods of arranging for the maintenance of irrigation works was the provision of servants

49. 398 of 1896.
50. 762 of 1917.
51. E. C., vii, Sh. 30.
52. Francis, *South Arcot District Gazetteer*, p. 138.

and necessary materials for such works. In 1367 provision for the maintenance of a tank in the Arasikere taluk was made in the following way. A buffalo man with his cart was appointed for it and it was ordered that for oil, wheel, grease, crowbar, pick-axe, etc., every-cart load of the original tenants had to pay two *tāras* and likewise every load of arecanuts, betel and oranges had to pay at the same rate.[53] In 1446 in accordance with the order of Uḍaiyār Dēvarasa Uḍaiyār a certain Akkadēva arranged for the annual clearance of silt in the tank at Teṉmahādēvamangaḷam (North Arcot district) with the *vēlikkuḻippaṇam*, *vās'alkuḻippaṇam* and *ērimīṉvilaippaṇam* and a small quantity of paddy on the cultivable land that were collected from the villages.[54] About the same period in the same district, one Ganga Nāyaka gave away the money realised by the sale of fish in the tank at Pūkkuṉṟam for deepening the tank.[55] In 1513 when two tanks in the Chennapatna taluk went into repair, a village was granted for the maintenance of the tanks and it was ordered that six carts were to be kept for their maintenance, four for one, and two for the other for putting earth on the bunds every year and keeping the tanks in good condition.[56] In certain places the income from the tanks was utilised for their maintenance. Thus Daḷavāy S'evvappa Nāyakkar set spart the income from the lease of fishery from the tank at Kodumgaḷūr (North Arcot district) for deepening it.[57]

Likewise the local administrative bodies like the village assemblies and the temple made provision for the upkeep of tanks. The local assembly of a village in the Mysore district consented to maintain a cart-man for the proper upkeep of the tank at the place.[58] They also,

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53. E. C., v, AK. 115; see also E. C., ix, Bn. 80; xii, Ck. 5.

54. 47 of 1933-34. வேலிக்குழிப் பணம் வாசல்குழி பணம் ஏரி மீன் விலைபணம், செறு நிலத்திலே நாறு குழிக்குப் பதக்கு நெல்லும் ஆக இந்த வகைப்படி வருஷ வருஷம் தோறும் ஏரியிலே இட்டு குழி வெட்டிவிக்கக்கடவது.

55. 424 of 1922.

56. E. C., ix, Cp. 156; see also MAR 1915, p. 93.

57. 145 of 1924; see also 424 of 1922; 118, 133 and 194 of 1921.

58. E. C., iv, Ng. 39.

acted as trustees of the endowment made for the maintenance of the tanks and met the expenses of the same, perhaps from the interest of the capital set spart for the work.[59] Likewise temples and private individuals helped in the maintenance of the tanks. In 1591 the residents of the village of Nangunēri agreed among themselves to remove each a certain cubic measure of silt from the big tank of the place in return for a measure of *pās'i* from the tank.[59a]

Whenever the tanks and other irrigation works had to be repaired, the work was immediatly attended to. In A. D. 1396 when an irrigation channel came to be blocked up, it was soon restored under the orders of Mallappa Voḍeyār.[60] A little earlier we hear of a chief who provided that the property of those who died without heirs at Lakṣmīnārāyaṇapura, must be used for the repair of the tank at the place.[61] In 1402–03, lands in some villages near Vaḻuvūr (Tanjore district) fell fallow on account of floods in the river Kāvēri, which washed away the demarcation, bounds and silted up the irrigation channels, which led to the abandonment of the fields by the tenants. The Government soon restored the channels and boundary banks and rehabilitated the villages.[62] In 1424 when the dam constructed across the river Haridrā by Bukka Rāya gave way, Nāgaṇṇa Vōḍeyār, the great minister of Dēva Rāya, got money from Cāma Nṛpāla, the Commander-in-chief of the army and restored the dam.[63] In 1450 when three tanks in the village of Kiḻiyanūr (South Arcot district) had breached owing to a severe storm and heavy rains, the local chief repaired them and built a sluice.[64] At times the Government

59. 474 of 1925.
59a. 262 of 1927-28. (குளத்திலுண்டான பாசியெல்லாம் துரக்காறர் சுதந்திரம் உள்பட ஆளொன்றுக்கு பதினெட்டடி நீளமும் ஒன்பதடி அகலமும் முச்சாண்மட்டிலெ குழியொன்றாக பெரியகுளத்திலெ வருஷ வருஷந்தோறும் குழி வெட்டிவிப்போமாகவும்.)
60. 66 of 1912.
61. E. C., xi, Dv. 70.
62. 422 of 1912; *Rep.*, 1913, para 52.
63. E. C., xi, Dv. 29.
64. 154 of 1919.

remitted the taxes payable to the palace to help in the repair of the village tank. By 1471 the village of Tiruvāmāttūr had become depopulated, the local lake had become silted and the local temple and its walls had gone to ruins. Hence the local officer remitted the taxes hitherto paid to the palace, such as the *vibhūti kāṇikkai*, *jōḍi*, *sūlavari* and *rēkai* so that the village might be rehabilitated, the temple might be reconstructed and the breached lake might be repaired.[65] Likewise private bodies undertook such work. At Tiruppaṇangāḍu (North Arcot district) the temple authorities of the place sold some of the temple lands in order to repair breaches of the village tank because they had no funds and the lands under them remained uncultivated for a long time.[66] Likewise when a dam in a river breached and was ruined, the authorities of a temple made a grant of land to some Brahmans for restoring the dam so as to form a tank. They were allowed to cut down the jungle, form a village, plot out fields and enjoy three parts of the income from the village and pay to the temple treasury the remaining one-fourth part. In such cases the temples expected the donee to keep the tanks in good condition and repair them whenever necessary.[67]

Charitable individuals also undertook such repairs as were necessitated by floods and other circumstances. According to a grant, for instance, Ēṭṭūr Immaḍi Kumāra Tātācārya laid the foundation stone for one of the twenty-three sluices of the Teṇṇēri tank at Teṇṇēri when it had breached on account of a cyclone and built them. The breaches are said to have been so serious that the repairing work had baffled the attempts of all other people.[68] It may also be noted that in a number of inscriptions of the Vijayanagar and later periods found in the Nellore district, provision

65. 8 of 1922; *Rep.*, para 49.
66. 251 of 1906; *Rep.*, para 53. see also 241 of 1906.
67. E. C., x, Mb. 7.
68. 434 of 1923

was made for the proper maintenance of irrigation tanks by levying contributions of grain at the rate of one *kuñca* on every *puṭṭi* annually. The grain so collected was spent on the repair and upkeep of the tanks concerned.[69]

As in the case of the construction of tanks, the Government encouraged such large hearted private effort in the mintenance and repair of irrigation works. In 1541 A. D. when the residents of Tirumadihalli (Anantapur district) repaired the breaches in the tank in their village the Government granted them one *kaṇḍūga* of *kaṭṭukōḍage.*[70] In 1636 when one Mēkalabomma of a village in the Kolar district repaired the breaches in the tank in his village, he was granted one fourth part of the wet lands near the breaches as *dasavanda.*[71] It was not however unusual for private individuals to bargain with the Government in the matter of repairing breaches and ask for some benefit from the Government. It was perhaps in such a spirit that when a tank in Sidalāyanakote breached in 1554 A. D, some people in the village made petition to the *Mahānāyakācārya* offering to have the tank rebuilt if the lands under the sluice were granted to them.[72]

When an irrigation work was repaired by more than one individual, it was usually arranged that the water from the source was to be enjoyed in proportion to the expenses incurred by the different parties. According to an epigraph of 1410 A. D. the annual repairs and other expenses in connection with the wells and tanks, formed under the channel, were borne in the proportion two-thirds by the temple and one-third by the Brahmans and hence the water of the channel was to be distributed in the same proportion.[73]

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69. 222 of 1922; *Rep.*, para 70.
70. 49 fo 1917
71. E. C., x, Bg 71; for some other instances see E. C., x, Mb. 131 and 132.
72. E. C., xi, Hr. 22.
73. E. C., xi, Dv. 23.

Irrigation disputes with regard to the necessity of an irrigation tank at a place or the proportion and turn of water from a source to the ryots of neighbouring villages were sought to be settled amicably. When a channel was dug near Tirumalai (Chittore district) by the authorities, the residents of the locality raised a serious objection on the ground that it was detrimental to the interests of the village. Therefore the *sthānattār* and Yajñaras'ar, the *Adhikāri*, inspected the place, and finding that the objections were legitimate, stopped the further progress of the work.[74] In 1406 A.D. a dispute arose between the villages of Ālattūr, hamlet of Uttaramērūr and Attipaṟṟu, a village near by, regarding the supply of water from the local tank. It was settled among themselves in the presence of Mahāpradhāni Aras'ar Tipparas'ar.[75] Likewise a record from Cellūr (Chittore district) of the time of Vīra Naras'ingayya Mahārāya registers an agreement between the residents of three villages, Maḍaiviḷāgam, S'ilaiyūr (Cellūr) and Kaṇḍiḍu regarding their respective right of irrigation from the channel called Sadās'ivakōṉai.[76] Similar regulations regarding the supply of water to the fields are recorded in a large number of inscriptions of the period.[77] When lands were acquired by the Government for making irrigation works, the parties that parted with their lands were provided with others, apparently in compensation.[78]

About the irrigation policy of the Vijayanagar kings, Crole says: "Many of them (irrigation works) now abandoned or in ruins, evince the solicitude of those ancient monarchs for the extension of cultivation even in tracts not favoured by natural position or the quality of the soil. Almost every catchment basin, however small, still bears traces of having been bunded across and in many instances

74. T. T. D. I., 224.
75. 357 of 1923.
76. 419 of 1925.
77. See E. C., iv, Gp. 41
78. 397 of 1909.

this was done in order to secure a crop of paddy on a few acres of stony ungenerous soil, to which all the fostering care of the British administration has failed to induce cultivation to return. Large and more expensive projects were not neglected. Even some of them bear witness to the enlightenment of those Hindu kings, while the absence of scientific instruments in those remote times compels the astonishment of the beholder."[79] Referring to the *anicuts* constructed in the Vijayanagar period, Major Henderson remarks :"The positions for the anicuts have been chosen with great judgment and the channels have been formed with consummate skill."[80] Likewise the words of Sir Thomas Munro about the irrigation system under the Vijayanagar kings in the area around Vijayanagar may be noted. He says: "To attempt the construction of new tanks is perhaps a more hopeless experiment than the repair of those, which have been filled up, for there is scarcely any place where a tank can be made to advantage that has not been applied to this purpose by the inhabitants."[81]

Section 3

Methods of Agriculture

Boundaries of lands

We have no reliable evidence to indicate the size of the fields, whether they were economic holdings or not; but from the fact that the lands were measured very minutely for purposes of assessment by the Government, we may assume that the cultivated lands were divided into small plots, by well-marked boundaries, over which boundary stones were erected. These stones were marked either with the conch and discus or the vāmana or linga mudra.[82]

79. *Chingleput District gazetteer.*

80. Report on important public works for 1852 quoted by Francis in the *Bellary District Gazetteer*, Vol. I, p. 95.

81. Gribble: *A History of the Deccan*, p. 188.

82. CP. 7 of 1912-13; MAR, 1924, No. 100; 432 of 1917; 213 of1924.

When the demarcation mounds between fields were washed away as for instance, by unprecedented floods, they were restored, after the floods subsided, to facilitate the affected land being brought again under cultivation.[83] Whenever disputes arose between the owners of two adjacent fields regarding the boundary between them, the Government interfered and settled the disputes and fixed the boundary according to old custom.[84] When, for instance, it was represented to Rāma Rāja Viṭṭhaladēva Mahārāja that two villages, granted to the Tiruviḍaimarudūr temple as Marudappar *Tirunāmattukkāṇi*, had been resumed by the Government and a request made that the lands might be returned to the temple, he sent one Tulaināyaṉār and a *Muttiira-vāngi ilingayar* (an examiner of seals (?) analogous to the Revenue Inspector of the modern day) to see if the boundary stones in the two villages contained the marks of Marudappar and on being assured that they bore the marks, he decided that the villages belonged to the temple and restored them to it.[85]

A curious custom followed in the Kannada districts for deciding a dispute between the owners of two pieces of adjacent lands, was that the disputants were to set out with a *handege* (a pot of unburnt clay) along the disputed area and to fix the line along which it was taken, for, if a mistake was done in tracing the boundary, then it was believed it broke.[86] Agricultural lands were divisible into *nīrnilam*, *kollainilam*, etc. [86a]

Process of Agriculture

The processes of agricultural operations in the Vijaynagar days do not appear to have been far different from what they are now. We have a contemporary description

83. 422 of 1912; *Rep.*, 1913, para 52.
84. E. C., viii, Tl. 115 and 197
85. 140 of 1895; S. I. I., v, 704.
86. E. C., vii, Sh. 107.
86a. 324 of 1911.

by Barbosa of the cultivation of rice in the Vijayanagar Empire. His account is follows: "All round they sow it in valleys and flats covered with water, for it is sown and reaped in water: they plough the land as we do with oxen and buffaloes yoked in pairs, and the ploughshare has a hollow in it wherein the rice is carried when the land is flooded, and as the share ploughs, the rice goes on settling down under water and earth. On dry land they sow by hand."[87] Varthema adds some more details. He says: "The men of Calicut, when they wish to sow rice, obeserve this practice. First they plough the land with oxen as we do, and when they sow the rice in the field, they have all the instruments of the city continually sounding and making merry. They also have ten or twelve men clothed like devils and these unite in making great rejoicing with the players on the instruments, in order that the devils may make that rice very productive."[88]

The implements used by the peasants in those days do not appear to have been different from those of our times, though we do not get any direct evidence as to those that were in use. The plough was certainly in use as is indicated by many epigraphs which refer to the measurement of a land in terms of the number of ploughs required to till it. Water-lifts appear to have been used in well irrigation. But we have no clear description of the ploughing animals, except stray references to oxen and buffaloes used for the purpose.

There was difference between *nañjai* (wet land) and *puñjai* (dry land). It was not unusual however for wet crops being raised on dry lands. In the wet (*nañjai*) cultivation there were generally two harvests, the *kār* and the *pas'ānam*. The season for the sowing of the *kār* began in May or June, and the harvest took place about Decem-

87. *Barbosa*, I, p. 192.
88. Jones, *Varthema*, pp. 166-167.
89. 91 of 1918.

ber or January. Occasionally there was a third crop which was called the *kaḍaippū*. The crops raised in the *puñjai* land were called *puṉpayir*. Lands were distinguished from the point of view of the source from which they were irrigated, from tanks or rivers.[90] The variety and number of crops raised on land in a particular area depended largely on the soil, the facilities for water and the monsoon conditions. According to John of Monte Corvino in the Coromandel "they sow and reap at almost all seasons, and this because it is always warm and never cold."[90a]

The standing crops appear to have been watched by persons known as *Nāyakavāḍis* who were appointed for the purpose.[91] They were remunerated by the grant of service *ināms* which were apparently called in the Tamil epigraphs *kākkunāyaka viḷāgam*.[92]

Labour

As said earlier, agriculture being the main industry in the country, a majority of the people depended on it. Among them there were two classes, one the landed employers, and the other, the labourers who earned their living by doing work on land. In the former class were the non-cultivating institutions like the temple and the *maṭha* and the landlords. In the latter class there were two kinds, the hired labourers who were paid their wages and the farm servants who were in the nature of the villeins and serfs of mediaeval Europe.

The hired labourers were taken in for seasonal work on the lands during seasons of transplantation and harvest and were paid daily wages either in kind or in cash. We get reference in a few inscriptions of the period

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90. P. S. I. 562.

90a Yule, *Cathay*, III, P. 61.

91. E. C., iv, Cn. 45. The *Nāykavāḍi* was a peon stationed in a village by the Collector or landholder specially to superintend the villages in their cultivation and see that the produce was not misappropriated or stolen; he performed also on occasions the duties of a watchman and a policeman.

92. 28 of 1890.

to the *kaivinaikkudi*[93] who was a labourer, hired daily as distinct from *puṛakkuḍi*[94] or *piṛakkuḍi*,[95] or simply *kuḍi*. The term *kaivinaikkuḍi* points to the employment of hired labour for cultivation purposes. But the other kinds of *kuḍis* were connected with the lands as servants and they were in the nature of serfs on the soil. They were generally natives of the soil attached to and possessing an interest in the land. They had a permanent and inalienable right (*kuḍikkāṇi*) to cultivate the land.[96] "In some cases they were residents of another village who were induced to settle in the village and cultivate the lands therein by the concession of permanent right therein, and who were given sites also in the village free for building houses thereon; in some cases they were the residents of the village, to whom a similar right had been given in respect of the hitherto uncultivated lands as an encouragement to bring them into cultivation and a recompense for the trouble and expense involved in rendering them such; and in some cases a similar right had been purchased by tenants on payment of a consideration."[97] The landlord usually enjoyed only an overlordship (*mēlvāram*) right over the land, and shared the income from it with the tenant in a proportion based on an agreement arrived at after having duly considered the nature of the soil and the kind of crop raised on it. The share of the *kuḍi* was known as the *kuḍivāram*. According to a record of 1555-56 A. D. for example, one Aubala Rāya was allowed te enjoy two-thirds of the produce from certain lands and was required to give the remaining portion (as *mēlvāram*) to the temple from which he purchased lands at Ālamūru. Usually whenever a piece of land passed from the hands of one person to another either as the result of a gift or sale the *kuḍi* or tenant in it also passed hands, and there was

93, 581 of 1893; S. I. I., v. 257.

94. P. S. I., 687.

95. *Ibid.*, 737.

96. *A Manual of the Pudukottai State*, Vol. I, p, 138.

97. S. Sundararaja Iyengar, *Land Tenures in the Madras Presidency*, pp. 55-6 see also, *Chingleput District Manual* p. 212.

98. 66 of 1915

specific mention made of it so that he may not be dispossessed of his right on the specified land. Thus we get such expressions as *kuḍiniṅgādēvadāna*[99] and *kuḍiniṅgāirai yili.* The former was a *devadāna* grant to a temple along with the *kuḍis* on the land while the latter indicates that it was a tax-free gift but along with the *kuḍis.* In this system of agricultural serfdom the tenant had as much interest in the land as the landlord. We have no reason to think that the condition of these agricultural serfs was deplorable. About their condition Barbosa remarks: "The more part of them (the Thiyas) are slaves bound to the lands of the Nayres to whom they are assigned by the king that they may live and support themselves by the labour of those men" and again "Nayres protect and cherish them"[99a]

The income from the land was shared between the landlord and the tenants; and this system was known as the *vāram* system.[100] As said earlier the *mēlvāram* payable to the landlord by the tenants was usually in kind and was fixed at a rate having regard to the nature of the land and the kind of crop raised on it. At a particular place in the former Pudukkōṭṭai State about the middle of the fifteenth century the produce from land was shared between the landlord and tenant in the following ratio:—[101]

Varagu, Tinai, Sesamum	½	:	½
Puñjai	4	:	1

In another case it was *sarivāram* ½ : ½.[102] In the Chingleput district about the beginning of the sixteenth century the produce was shared between the landlord and tenant in the following ratio:—[103]

Produce from *Kamuguvaittanilam*	2	:	2
Cocoanuts	3	:	1

99. P, S. I., 714 and 819; 12 of 1893; 45 of 1922.

99a. *Barbosa*, II, p. 60.

100. 96 of 1918.

101. P. S. I., 706.

102. 197 of 1910; 237 of 1921; (இசைவுச் சேதம் பாதி பாகமாக அனுபவிக்கவும் I. P. S., 711.

103. 45 of 1890; S. I. I., iv, 368.

Before 1535–36 A.D., the *mēlvāram* on areca, cocoanut, mango and other trees grown on the *tiruvidaiyāṭṭam* lands of the temples at Kāñcīpuram was three-fourths of the yield and the remaining one-fourth went to the cultivator. But when in a severe drought the trees withered, the tenants were asked to plant fresh trees and pay *mēlvāram* in the reduced ratio of two-thirds on the yield of the plantations while in the case of sesamum, green gram and sugarcane, the rates obtaining in adjacent villages were adopted; and in cases where betel, plantain and other quick-yielding crops were reared side by side in the newly planted areca and cocoanut groves, the *mēlvāram* was fixed at three-fourths of the old rates.[104] A few years later in the present Nellore district when new channels were being provided in a particular year certain terms were agreed upon, according to which the produce raised on dry fields was to be divided into four shares of which three were to go to the ryot and one to the State every year; and the grain raised under the tanks was to be divided into three shares of which two were to go to the ryot and one to the State every year.[105]

It appears the tenancy rights could be sold by their holders. In 1548–49, some four individuals sold away their hereditary tenancy rights over half of the lands at Kambargudi to the local temple.[106]

Another kind of tenure under which land was cultivated was the *kuttagai* or lease system,[107] according to which the lands were leased out for a fixed annual rent usually calculated on the basis of the average yield for a number of years. The lease holder was required to raise a particular kind of crop on the land for a certain number of years; but at the same time the lessor took care to see that the permanent interests of his land were not neglected by the lessee

104. 655 of 1919; *Rep.*, 1920, para 48.
105. *Nel. Ins.*, I, Atm, 48.
106. 106 of 1924.
107. 409 of 1913; *Rep.*, 1914, para 30.

particularly with regard to the levelling of lands, the removal of shrubs, repairing of irrigation sources, etc. The *kuttagai* payable to the landlord was in kind or in coin or both, as the case might be. The lease or *kuttagai* was at times called *uḻavu kāṇiyākṣi*. Sometimes the *uḻavu kāṇiyākṣi* was given in the case of new lands for being brought under cultivation. It usually consisted of a permanent lease of an uncultivated waste which the lessee was authorised to reclaim and to settle, to grow crops that suited him, wet or dry, including plantain, sugarcane, turmeric, ginger, areca, and cocoanut and after doing this to pay the taxes in gold and grain.[108] To that was also added the right of living on a piece of land belonging to the landlord (*kuḍiyiruppu kāṇiyākṣi*). It was not unusual that with regard to the *kuttagai* a progressive rate was fixed. Thus when a particular person was given the village of S'embiyamangalam with *uḻavu kāṇiyākṣi* (right of cultivation) in 1514–15 A. D. he was required to pay ten *paṇams* and ten *kalams* of paddy in the first year but in the fifth year it was raised to fifty *paṇams* and fifty *kalams* of paddy. It is reasonable to assume here that for the intervening three years the rates of rent increased progressively.[109] The share of the produce payable to the landlord must have differed with the nature of the land, the kind of crop raised and the length of period for which it had been under cultivation. Unless there is specific statement in the document creating a lease to that effect, it would be hazardous to say that the lessee had any permanent right on the land held under lease. For instance, in the cases of the grant of *uḻavu kāṇiyākṣi* referred to above, it appears that there was no mention of the permanent nature of the grant of the right of cultivation. But there would be no reason to deprive a lessee of his land during the period of the lease if he fulfilled the conditions regularly.

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108. 353 of 1912; *Rep.*, para 56; see also 372 of 1912.
109. 389 of 1912.

According to another system of cultivation, the landlord carried on the cultivation with the farm servants which at the present day is known as *paṇṇai* system. It appears that they are the persons mentioned in an inscription which refers to *kaḍamai ūḷiyars* (forced labourers or serfs).[110] They were paid generally in kind at a monthly rate. Besides, they were, as they are even now, allowed a piece of land to live on, and small presents of cloth, paddy and cash on important religious and ceremonial occasions every year.

Livestock

As regards the supply of animal power for cultivation purposes we do not have much information. But the frequent mention of the plough for purposes of cultivation naturally leads us to infer that there was available abundant livestock in the country. Besides, the preservation of waste and pasture lands in every village shows that much care was taken to provide for the livestock.

The foreign travellers give good descriptions of some breeds of oxen which were yoked to carriage and used for drawing ploughs. Barbosa says that oxen, asses and small ponies were used as beasts of burden and as ploughing animals.[111] Buffaloes were also used for ploughing purposes.[112] Paes and Nuniz as also Varthema and Barbosa refer to the breeding places in the Dekkan, besides places round about Dābūl, Rosyl, and Vingapor in which were many seed-plots and cattle-breeding farms.[113] Sheep and goats were reared in many places and areas in South India, such as Bathecala, Kolar, Coromandel, Calicut, Onor, Rosyl, etc.[114] From Mādhavācārya's definition of

110. P. S. I., 737.
111. *Barbosa*, I, p. 200.
112. *Ibid.*, II, p. 68; Sewell, *op. cit.*, p. 259; Varthema, *Travels*, pp. 10 and 172.
113. Sewell, *op. cit.*, p. 386; Varthema, *Travels*, pp. 114 and 122, *Barbosa*, I. pp. 166 and 200.
114. Varthema, *Travels*, p. 120; *Barbosa*, 1, p. 200; Sewell, *op. cit.*, pp. 259 and 386.

vṛṣa as bull kept for impregnation it may be inferred that breeding bulls were also reared.[115]

Regarding the supply of manure it is not possible to say how much of it was available. Though there could have been in the Empire atleast as many cattle as there are now, it is not likely that all their manure would have been used on the cultivated lands. For one thing, much of it would have been left as even today in the pasture lands without being collected; and for another, it is likely that a part of the manure collected was used as fuel on a large scale and burnt, thus leaving only a part of it to be spread over the cultivated lands.

Village Self-sufficiency

It is said that the best manure for land is the personal supervision of the landlord; and one of the questions connected with the problem of rural reconstruction in the modern day is the one relating to absentee landlordism. In the Vijayanagar days the evils of such absentee landlordism were well realised and much anxiety was felt by the landlords to have lands very near their places of occupation. For instance, when the village of S'iṛṛāyanallūr granted to the temple of Kōlavāmana Perumāḷ was found to be "far away" other lands were granted at S'ikkil, a near place, in return for the original gift.[116] The community was also anxious that outsiders must not get any benefit by the purchase of lands in its village. According to an inscription at Māngāḍu, in the Chingleput district, the residents of the village made an agreement among themselves "that any owner of land (in the village of Māngāḍu) (desirous of) selling (his land) must sell it to a land-owner within that village and not to any outsider, nor could he give even as dowry (*strīdhana*) lands in the village to an outsider."[117]

115. *Parās'aramādhavīya*, III, p. 268.

116. 100 of 1911.

117. 354 of 1908; *Rep.*, para 67. (மாங்காட்டில் ஊரவர் நம்மில் பொருந்தி கல்வெட்டினபடி நம்முடைய ஊறகு இனறுள் முதல் ந.........வர்கள் காணி விற்கறபொழுது உள்ளூரிலெய் காணி ஆளுகிறவர்களுக்கு விற்கிறது ஒழிந்து புறவூரிலெ விற்கக் கடவதல்லவாகும். புறவூரிலெ ஒருவருக்கு சிதனம் குடுக்க கடவதல்லவாகவும்).

They were equally anxious to see that ownership of property did not pass from one community to another. Thus in 1474 A. D. the people of Mālavalli in the Mysore district made an agreement among themselves that if any one among the shareholders (who were evidently Brahmans) mortgaged or sold his share to S'ūdras, he should be put out of the Brahman community and such share must not belong to that place, so that it would lose its right to water and other common benefits.[118] The villagers wanted to be so exclusive that outsiders found it very difficult to get land for cultivation in the villages, for in such cases local labourers would not get land for cultivation which would lead to agricultural unemployment in the village. Hence certain difficulties were placed by the villagers in the way of outsiders taking up cultivation in their villages. For instance, the following rule was made for the cultivation of the rice lands at Honganur: "If in addition to the resident ryots, any important resident in the neighbourhood plough (these) he may do so in accordance with the *paṭṭe* granted by the *Māsanikāra*, *Pārapatyagāra*, *Gauḍa*, and *Sēnabōva*; not according to the same rule as the resident ryots. If any one setting at naught this order is not prevented at the time by the *Karaṇika* of the *Cāvaḍi* and the *Gauḍa* and *Sēnabōva* they will incur the guilt of slaughtering cows, etc." [119]

Another instance of the anxiety of the villagers to be exclusive is provided by the prevalence of a rule in some places that the sugarcane grown in a particular village had to be pressed out for juice only in the village in which it was grown.[120] This not only points to the isolation of the villages but also to their self-sufficiency.[121]

But this description of the isolation of the villages must not be pressed too far, for there is evidence to believe

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118. E. C., iii, Ml. *121*.
119. E. C., iv, Cn. 38.
120. 103 of 1918; *Rep.*, para 69.
121. See Gadgil, *The Industrial Evolution of India in Recent Times*, pp. 10-13.

that the villages, individually and in groups, came into close contact for various purposes. Administrative arrangements, holding of frequent fairs, trade movements and the migrations of people from one place to another tended to break the isolation of villages to a large extent.

Rural Credit

The temple, which played an important part in the economic life of the rural population, usually maintained a treasury of its own and received deposits of money from the people. The temple treasury, besides, served the rural public by offering them credit whenever they were in need of it. The people who instituted festivals and services in the temple usually deposited a particular sum of money in the temple treasury from the interest of which the expenses of such festivals and services were met. It was the general practice to utilise that capital for the improvement of tanks, channels and other irrigation sources in the temple villages, raise or increase the production from such land, and with the income got thereby, meet the expenses of the stipulated festivals and services. Thus rural agricultural credit was provided by the indirect method of the institution of festivals and services in temples by pious devotees.[122] When however the temple was not able to get back the amount it had lent, it purchased the land of the debtor to the extent necessary to clear off the arrears. According to an inscription at S'ēvalūr in the former Pudukkōṭṭai State the authorities of the temple at the place had lent three hundred *s'akkara paṇams* to the *ūravar* of Tēṉūṟu Vaḍappaṟṟu who had taken the amount for the payment of *kāṇikkai*. But since they could not pay back the money borrowed they sold some land to the authorities of the temple.[123] The temple at times even sold away a portion of its lands, the proceeds of which were utilised for the repair of breached tanks when the people were not able to do so.[124]

122. See T, T. D.I.. v, Nos. 10, 15, 25, 34, 59, 86, etc.

123. P. S. I., 723; see also 733.

124. 241 and 251 of 1906; Rep., 1907, para 53.

Yield from land

The productive capacity of land either wet or dry depended on the fertility of the soil and the required supply of water. Good wet lands were usually found on the ayacuts of the best tanks. The *accukkaṭṭu* lands which were the same as the *manavāri* or rain-fed lands of the Madras State were of an inferior type which could not compare favourably with the wet lands in many parts of the Empire. It is difficult to get even a rough idea of the general yield of lands in the Empire on account of the paucity of evidence on the subject and the diversity of conditions prevailing in the different parts of the country. In some inscriptions we are merely told that particular villages yielded a given annual income in money, and in such cases it is not possible to have an idea of the grain income from a unit of land, for we do not know, for one thing, the area of the cultivated land in the village, and for another, we have no knowledge of the price of the grain produced on the land. Such statements in the inscriptions of the period that ten villages yielded an annual income of five thousand seven hundred and thirteen *rekhai poṉs* or two and a half villages yielded an annual income of four hundred *rekhai poṉs* do not help us much in estimating the average yield from land.[125] Mādhavācārya however while writing a commentary on the text of Parāśara assumes that the average out-turn from land was twelve times the seed sown.[126]

In South Canara a piece of land capable of yielding one crop annually (a *beṭṭu* as it was called) required two *muḍe* of paddy calculated at thirty *ballas* (each *balla* being equal to two seers generally) as seed for sowing purposes.[127] It may be noted that for an acre of wet land of average fertility in the Tanjore district at the present day a *kalam* (twenty four Madras measures) of seed is required for sowing purposes. About 1430 the assesement in paddy on one *vēli* of wet land

125. T.T.D.I., v. Nos. 125 and 129.

126. *Historical Sketches of Mysore*, I. p. 95; *South Canara Manual*, pp. 94-96.

127. E. I., xx, p. 90.

in the Tanjore district was fifty *kalams* of paddy. besides other taxes amounting to about twenty *paṇams*. The assessment on a *vēli* of uncultivated waste (just brought under cultivation) was forty *kalams* of paddy and about eighteen *paṇams* of other taxes, while that on a *vēli* of *kaḍaippū* land and land irrigated by baling water was twenty *kalams* of paddy and ten *paṇams* of other taxes.[128] If we take that the assessment on wet land as recorded in the epigraph conformed to the recommendations of Mādhavācārya, i. e., one-fourth of the yield, then we may suppose that the yield from the average wet land in the Tanjore district in the fifteenth century was not far different from what it is now, for it was about two hundred *kalams*.

Value of land

The part, land played in the economy of mediaeval South India can hardly be exaggerated. Services to the State were usually remunerated by assignments of land, the income from which the servants could enjoy. Persons were honoured with grants of tax-free land as *ināms* or *sarvamānyams*. Land was taken in lieu of non-recoverable debt, and dowry was in many instances paid by gift of land. Thus the demand for and the use of land for ever so many purposes show that it had great value in the mediaeval economy of South India. In the face of such clear evidence the remarks of Baden Powell that under Hindu Governments in the Dekkan and in the South, the ryot was not allowed to sell his land and that it may be questioned whether as a rule it had any market value requires revision.[129] We have no clear evidence about the price of land in the period except from occasional references to it in inscriptions. Some of them refer to it in terms of the annual rent payable on land, some refer to it in terms of the taxes fixed on it, while some refer to it in terms of its area. The epigraphs range over a long period and the price of land indicated by them may be noted in the following table:-

128. 59 of 1914; *Rep.*, 1915, para 44.

129. *The Indian Village Community*, p. 424.

Reference	Date	Place	Unit	Price	Remarks
EC. vii, Sk. 282	1368	Shimoga			5 times the value of the annual rent.
SII, i, No. 72	1374-75	N. Arcot	32 kāṇis	40 poṇs	
MER 350 & 359 of 1923.	1382		2/3 share of 2 villages 1/3 share of the same 2 villages	400 paṇams and 500 panams. 200 paṇams and 250 paṇams	
EC, vi, Kp. 52	1403	Kadur	6 villages	500 varāhas	
EC. vi, Kp. 53	1403	Kadur	3 cities	150 honnus	
EC, viii, Tl. 104	1404	Shimoga	3 villages	250 poṇs	
EC. viii, Tl. 134	1409	Shimoga			Price fixed by arbitrators.
EC, viii, Tl. 176	1415	Shimoga	Khaṇḍūga	15 haṇas	
EC, vi, Kp. 27	1427	Koppa	30 saleges	85 varāhas	
ASS, iv, p. 149	1427	Chingleput	1925 kuḷis	125 pagodas	Kuli measured by the measuring rod of 32 ft. long.
ASR. iv, p. 151	1429	Chingleput	2000 kuḷis	115 pagodas	Do
274 of 1897	1435	Do	2000 kuḷis	300 paṇams	Do by 12 ft. kōl.
27 & 28 of 1912	1446	Tinnevelly	2 mās	630 paṇams	
EC, ii, Sr. 89	1458	Mysore	Land yielding 40 pagodas	400 pagodas	
MAR, 1918, p. 121	1499	Coimbatore	1 sallage	4 pons	
EC, vi, Kp. 21	1509	Kadur	30 khaṇḍis of land.	120 gadyāṇas	
118 of 1904	1564	Tinnevelly	12 kōlagas	60 pagodas	
EC, iv, Yl. 28	1559	Mysore	1 khaṇḍuga	20 honnus	
MAR, 1916, p. 104	'Sri Ranga	Kadur	land yielding 78 khandugas	78 varāhas	
EC, iv, Yd. 34	1628	Mysore	a village	212 varāhas.	

Marketing of Goods

One of the important inducements to agricultural operations is the facility for the sale of the goods produced. This subject will be dealt with in detail in the section on foreign trade, but it may be noted here that there was great demand for the raw products of the country and facilities for their sale existed in the Vijayanagar Empire. Rice for instance was exported to important places in Arabia and Ormuz,[130] besides to Malabar.[131] Wheat, as rice and millet, was in demand in Melinde in Africa,[132] while cocoanut was exported to Aden and Ormuz.[133] As for internal consumption, these articles were sold in *santes* or fairs which were held either weekly or at periodical intervals in many places in the Empire. At important places, like Vijayanagar itself, fairs were held every day in different parts of the city.[134] In order to induce merchants to bring goods to the market, concessions were shown in the matter of taxation of the articles that entered the place for a particular period. In one case grain entering the fair wholesale was exempted from the payment of all dues for a year.[135]

Section 4

Extension of Cultivation And Reclamation of Land

Though agriculture was the main industry in the country and the foreign travellers who visited Vijayanagar testify to the fact that large tracts of land were cultivated in the Empire, yet, it appears that there were still wild forests and uncultivated waste lands which could be brought under cultivation. Further, during some periods,

130. *Barbosa*, I, pp. 64 and 188.
131. *Varthema*, p. 192.
132. *Barbosa*, I, p. 23
133. *Ibid.*, I, pp. 55--55, 92.
134. Sewell, *op. cit.*, pp. 255--56.
135. E. C., x, Sg. 112.

villages were depopulated and lands fell out of cultivation largely owing to causes like unfavourable monsoon, unprecedented floods or even the taxation policy of the provincial rulers, as a result of all of which, the people had at times to leave their villages and migrate to other places. The Vijayanagar Government realised the need for the improvement of the economic resources of the Empire and paid much attention to agriculture. This policy was pursued in two directions, by the formation of new villages and the extension of cultivation in the virgin soil and by the reclamation of deserted villages and lands. The sovereigns formed new villages by clearing forests and bringing fresh lands under cultivation, and thereby increased the gross yield from land. Though such formation of villages in uninhabited places was largely prompted by religious motives–for many villages were formed and gifted away to Brahmans as *sarvamānyams* for the attainment of merit–it contributed much to the economic welfare of the people. In a place in the Mysore district, for instance, a local chief made a grant to certain persons to enable them to cut down jungle, erect a fort and cultivate the land.[136] In order to encourage colonisation of fresh lands and to bring them under cultivation, the Government exempted them from the payment of taxes for a specified period. When Kṛṣṇadēva Rāya constructed a big tank near his capital he gave his subjects lands irrigated by the water in the new tank free for a period of nine years until they had made their improvements as a result of which policy the revenue of the state increased by twenty thousand pardaos.[137] In 1379 one Ankaya Nāyaka and a few others exempted certain lands in the Nondigulināḍ which was under their jurisdiction from the payment of taxes for two years.[138] Then again according to an epigraph at Narattampūṇḍi in the North Arcot district, a village formed by and named after Kumāra Kṛṣṇamara-

136. E. C., iii, My, 86.
137. Sewell, *op. cit.*, p. 365.
138. E. C., ix, Ht. 50.

as/ayyan was granted to the temple of Aṇṇāmalaiyār with the remission of taxes granted to the settlers in the village for the first six years.[139]

At times though such wholesale remissions or exemptions were not made for a specified period, assessment was made on a graded scale. In 1514–15 A. D. when one Namas/s/ivāya Nāyaka received a village as an *uḻavu kāṇiyākṣi* (land with the right of ploughing) he was required to pay ten *paṇams* and ten *kalams* of paddy in the first year, but it was raised to fifty *paṇams* and fifty *kalams* of paddy in the fifth year.[140] It is possible that in the intervening period of three years the rates of taxes increased progressively. About the same period an order was made exempting the tenants colonising Aras/arkōyil from the payment of all taxes for a year and fixing the rates of some taxes leviable from the following year.[141]

Besides bringing fresh lands under cultivation, the Government reclaimed lands that had gone out of cultivation for one reason or other. We have clear evidence of such a policy recorded in an epigraph of 1402 A. D. in which graded rates of assessment were fixed on the lands reclaimed. According to it lands near Vaḻuvūr in the Tanjore district were lying fallow on account of floods in the Kāvērī which washed away the demarcation bounds between fields and silted up the irrigation channels. The tenants had therefore to abandon the fields for a considerably long time. The lands were reclaimed, the channels restored, the boundary marks repaired and the tenants rehabilitated on certain favourable conditions which are enumerated in the inscription as under.

1. During the first year of holding, half of the usual dues would be collected both for *kār* and *pas/ānam* and three-fourths from the following years;

139. 380 of 1925.

140. 389 of 1912.

141. 307 of 1921. நாளது முதல் ஒரு வருஷம் மானியம் நடத்தக்கடவர், இதுக்கு மேல் வருஷம் ஒன்றுக்கு செட்டி வியாபாரிக்கு...

2. of money collections *kuḍimai* and *kāṇikkai* being declared *nīngal*, half of *paḻavari* and *puduvari* alone would be levied;

3. the tenants too would be assessed at half rates during the first year of *kaḍamai*, *aras'upēṟu*, *vās'alpaṇam*, *āyam*, *pulvari* and other such taxes while from the following year they would be required to pay three-fourths rates except in the case of *pulvari* which would remain the same.

4. *magamai* and *kāṇikkai* would be treated likewise and;

5. the same concessions would be allowed also in the case of lands belonging to temples and Brahmans.

To induce others in future to undertake such reclamation, the person who was chiefly responsible for reclaiming the lands was given the special privilege of collecting *kaḍamai* from all the tenants who cultivated under his direction. This concession of charging half rates of assesment during the first year was extended also to other waste lands which might similarly be brought uuder cultivation year after year.[142]

The Government, besides themselves bringing fresh lands under cultivation, encouraged private initiative in that direction. Kṛṣṇadēva Rāya for instance made a grant of one-fourth of the *accukkaṭṭu* land as *das'abanda* under the tank of Balireḍḍihalli (Anantapur district) to a certain Bali Reḍḍi, for his having formed a new village, constructed a temple and dug a tank, wells, etc. at the place.[143] In 1416 a grant was made to a certain person under the following terms :- "We grant to you the tract of land bounded as follows:— ....in which you may cut down the jungle and form fields; and the rice lands under and in the area of the tank which you construct, dividing them into

142. 422 of 1912; *Rep.*, 1913, para 52; see also 140 of 1915 for similar privileges

143. 768 of 1917.

four parts.........in consideration of your having expended much money of your own and constructed the tank, three parts we grant.[144] Likewise temples undertook such reclamation work. A certain land, on account of its high non-irrigable level was lying waste for a long time past overgrown with wild shrubs. The treasury of Tirumaḻis'ai Āḻvār purchased as *uḻavukāṇi* two pieces of land which belonged to a temple at Paḍaipaṟṟu *alias* Tēpperumāḷnallūr, reclaimed and brought them under cultivation and leased them for two hundred *paṇams* per year.[145]

In order to encourage such reclamation, the Government granted important privileges which were highly valued then. During the days of Virūpākṣa a few taxes were remitted and some privileges were granted to those that colonised Narasimha Tirupati.[146] About the middle of the sixteenth century two officers of Government in the modern Ramnad district, Sāḷuva Nāyaka and Appā Piḷḷai, found that a village had gone into ruin since the tenants had dispersed and none was willing to come and settle in the village. Hence they sent for S'akkadēvar, Vēṭṭuvakkāṭṭan *alias* S'āyapaḍaitāngi and his brother S'iṟukāṭṭavaṉ and also for the two agents of Tammaya Nāyaka and declared that as these had got tenants for the village and resettled it, the first would be given the right of *pāḍikāval* over the particular village surrounding the temple (Tirumalai) receiving the customary donations and fees after allowing common rights and cultivating and paying the usual dues to the temple such as *kāṭṭtumūkkai*, *mīs'am*, *as'upōḍu*, *makkaḷpēṟu*, etc. They were further required to give to the temple one *tūṇi* and one *padakku* on each *mā* of harvested wet land and receive one *tūṇi* on each *plough* for the Valaiyar and one *padakku* for the Paṉavaṉ. They were also allowed to receive the honour of getting the sacred cloth (*parivaṭṭam*), *tīrtha* and the sacred ashes from the temple. Later an

144. E. C., x, Mb. 7; see also E. C., xi, Dv. 23.
145. 258 of 1919; *Rep.*, 1920, para 42,
146. 120 of 1921.

agreement was made between the authorities of the temple in the village and the *tantrimār* regarding the rehabilitation of the place by one S'ittama Nāyaka, the agent of Tammaya Nāyaka of the place.[147] Likewise taxes were remitted.

Similarly a certain Viraya, son of Basavaya of Koṇḍanūr, was given a stone charter that, since a particular place had for a long time been uncultivated and uninhabited and had consequently gone to ruin overgrown with trees, he might cut down the trees, fill up the ditches, renew the boundaries of the fields, rebuild the village, stock it with ryots, give out the land and collect taxes according to former custom.[148]

At times taxation by the provincial rulers was so heavy that the people abandoned their original homes and migrated to other places where taxation was not so heavy. The government realised the economic loss by such wholesale migrations of people and lost no time to recall them assuring them favourable concessions. Kṛṣṇadēva Rāya says in his work, the *Āmuktamālyada*, that "the king is never prosperous even though he conquers the seven *dvīpas* who has an officer who does not call back the subjects when they leave the State on account of suffering.[149] Thus when about 1450 A. D. the tenants (*kuḍi*) in twelve villages of Ugaḷūr Kurumbarvāy s'irmai had abandoned them owing perhaps to heavy taxation an agent of Vīramaras'ar regulated the taxes at five *paṇams* for the first year and ten from the following year on each *plough* of dry land and at eight *paṇams* on every hundred *kuḻis* of wet land.[150] At the commencement of the sixteenth century the people in portions of the present Salem district suffered from oppressive taxes and hence the inhabitants of the district (*nāṭṭār*) of

147. 48 & 49 of 1916; *Rep.*, para 83.

148. E. C., iv, Gp. 39.

149, Canto, IV, v. 237.

150. 36 of 1913. இந்த சிர்மைக்கு முன் அடைட ஓலே நிறையம் அற்று குடியிலி பாழாக ஓடிப்போகையில் யிந்த சிர்மைகு குடி வருகிறபெறகு புஞ்சை புது ஏற்கு அஞ்சு பணமும் இதின் எதிரும் வரும் ஷத்துக்கும் ஏற்குப் பத்து பணமாகவும் நஞ்சைக்கு 100 குழிக்கு எா றன்றும் எக்டுப் பணமும் ஆக தாம் கொள்ளும்படி நிறையம் யிட்ட)

Magadaimaṇḍalam left the country. Therefore Tyāgaṇṇa-Nāyaka who was perhaps the local officer interfered to stop such migrations and granted a pledge (*aḍaiōlai*) to the people.[151]

Almost about the same time the people in portions of the present South Arcot district groaned under the weight of heavy taxation besides rigorous collection. Hence Triṇētranātha Kaccirāyar, son of Paḷḷikoṇḍaperumāḷ Kaccirāyar, who was then the Governor in the locality about S'rīmuṣṇam, revised the rates of taxes which had become exorbitant in the time when the country was in the hands of the Kaṇṇaḍiyas. The cultivators owing to oppression had dispersed and the *svarūpa* (?) was scattered. He ordered :

1. that the lands be measured year after year with the standard rod of thirty-four feet;

2. that fifteen *paṇams* (including all items of taxation) be levied on one *mā* of dry land and twenty *paṇams* on one *mā* of wet land;

3. that towards *arasuperu* one-eighth *paṇam* be levied on each tenant, three *paṇams* on each loom of Ceṭṭis, two *paṇams* on Kaṇmāḷa agriculturists, three *paṇams* on Kaikkōḷa weavers; and

4. that towards *iḍaiturai* be collected one-fourth *paṇam* on eight sheep.[152]

But even this new arrangement did not satisfy the people and hence they again migrated to other parts. Therefore S'innappa Nāyaka, brother of Vāsal Ādiyappa Nāyaka, fixed favourable rates of assesment in 1513–14 A. D. According to this arrangement the permanant settlement of *kaḍamai kāṇikkai*, *kuḍi*, *māḍukāṇikkai*, *puṟavari*, and *viniyōgam* was fixed at twenty-eight *paṇams* on wet lands

151. 422 of 1913.

152. 427 of 1916; *Rep.*, para 64,

and twenty-two *paṇams* on dry lands for such people as resided in the districts; twenty *paṇams* on wet lands and fifteen *paṇams* on dry lands for those who were going and coming; and again fifteen *paṇams* on wet lands and ten *paṇams* on dry lands for those that lived outside.[153]

Section 5

Systems of Land Tenure

In a mainly agricultural country like India the first thought which presents itself to a student of the agrarian system of the country is the question of land tenures on which depends to a very large extent the land revenue of the Government. Theories regarding land tenure are at the present day of great practical importance. A study of the systems of tenure and the question as to with whom the proprietorship of the soil rested at a particular period, has to be made, more with the available evidence for that particular period than with the help of theories on such subjects pronounced from time to time. What great jurists and lawgivers like Manu, Nārada and Kauṭalya thought about them may not be equally good for later periods. Therefore for a knowledge of the systems of land tenure in the Vijayanagar period, the contemporary sources have to be carefully studied.

Proprietorship of soil

A very important feature of one's right to a particular piece of land is his power to dispose it of. As Elphinstone truly says, "property in land seems to consist in the exclusive use and absolute disposal of the powers of the soil in perpetuity, together with the right to alter or destroy the soil itself where such an operation is possible. These privileges, combined, form the abstract idea of property, which

153. 246 of 1916; *Rep.*, para 16.

does not represent any substance distinct from these elements. Where they are found united there is property and nowhere else." [154] From the available evidence we are led to think that the ryot in the Vijayanagar days was in absolute enjoyment of the cultivated lands which were not in the possession of the king. He could not be ejected by the government, so long as he paid the fixed assessments and fulfilled his obligations. The state's share of the produce was due to the protection it afforded to the people. We may quote here Wilson's description of the limitations of the titles of the king over the land which is classical. He observes: "He (the king) is not lord of the 'soil', he is lord of the earth, of the whole earth of kingdom, not of any parcel or allotment of it; he may punish a cultivator for neglect, in order to protect his acknowledged share of the crop; and when he gives away lands and villages, he gives away the share of revenue. No donee would ever think of following such a donation by actual occupancy; he would be resisted if he did. The truth is that the rights of the king are a theory, an abstraction; poetically and politically speaking, he is the lord, the master, the protector of the earth (prithivipati, bhūmis'wara, bhūmipa) just as he is the lord, the master, the protector of men (narapati, nares'wara, nripa). Such is the purport of the common title of a king; but he is no more the actual proprietor of the soil than he is of his subjects; they need not have his permission to buy it or sell it or to give it away, and would be much surprised and grieved if the king or his officers were to buy or sell or give away the ground which they cultivated." [155]

A reference to the highly valuable opinion on this question of Mādhvācārya who wrote a commentary on the *Jaiminīya Nyāyamāla* may not be out of place here. Commenting on the text of the work, 'the *mahābhūmi*, the

154. *History of India*, pp. 79-80.

155. Mill and Wilson, *A History of India*, I, p. 212; see also *Fifth Report*, II, p. 495.

public land, is it an object of gift ... the king may give it away because he possesses it; the kingdom is the king's only for the sake of protection, and hence it should not be given away.' Mādhavācārya observes:

"But doubts may arise. When an all powerful king gives away everything he possesses, at the commencement of the Visvajit sacrifice, is he to give away the *mahābhūmi* which is inclusive of paths for cattle, highways and tanks? (The doubt arises because) the earth is wealth, *vide* the *Smṛti* which says: 'The king may claim the property of all except that of the Brahmans'.

"We reply: the *Smṛtis* enjoin that the king's sovereignty is meant to punish the wicked and to protect the good. No, the earth is not the king's property. But it is the common property of all the living beings for them to enjoy the fruit of their labour. Therefore though he (the king) has the right to give away that portion of the land that is not common (public–*asādhāraṇa*) he cannot give away the *mahābhūmi*".[156] About the private ownership of the soil in the Malabar district Sir Charles Turner remarks: "The Hindu Law not only recognised the sale of land and the inheritance of land all in complete ownership; subject except where held by Brahmans to the payment of the king's due; but also recognised a multiplicity of forms of mortgage,........... others to the actual ownership........... they point to an ownership of the soil as complete as was enjoyed by a freeholder in England".[157] These observation are as much applicable to other parts of South India. The fact that the proprietorship of the soil rested with the people is borne out also by the frequent purchases of land made by the kings and their feudatories for providing for festivals and services in the temple by making endowments for the same.[158]

156. *Jaiminiya Nyāyamala Vistara*, p, 358.
157. *Minute on the Draft Bill relating to the Land Tenures of Malabar*, 17 and 23
158. 538 of 1929-30.

Thus the kings recognised the right of the people for the proprietorship of the soil. The property of the father was usually inherited by the son or failing him by the nearest kinsman. This is well borne out by a few inscriptions which record the respect paid to private ownership of property. An epigraph from Shimoga says for instance: "If any one in your village dies without children, brothers, or other posterity, all their jewels and property, whatever it may be, we will distribute among claimants of the same *gotra* as the deceased......... Moreover we will not take as forfeited to the palace the property of those who are childless."[159]

Complete proprietorship of the soil meant the eight-fold rights of possession. These are *nidhi*, *nikṣepa*, *jala*, *pāṣāṇa*, *akṣiṇi*, *āgami*, *siddha*, and *sādhya* which may be translated as deposits of buried treasure, water, stones, the *akṣiṇi*, that may accrue, that which has been made property (?), that which may be made property (?), and augmentation. Such rights were at times known as *divva bhoga svāmya* rights or *aṣṭa bhoga tejah svāmya*.[160] Such proprietorship was also called at times *kāṇiyākṣi*.[160a]

This does not mean, however, that kings did not possess any lands. They possessed lands which in course of time were increased. We have innumerable instances of extensive alienations of tax-free lands and villages by the kings and their viceroys. Here there were two kinds of grants, the right of the king over the soil and complete ownership of the soil. It is only in cases of the latter type that we may say that the king had the complete right, both *kuḍivāram* and *mēlvāram*, over the soil and enjoyed its possession. But if the king wanted to make to a person or institution, a grant of the full possession of a village which was already in the possession of private individuals then he had

159. E. C., viii, Ng. 5.

160. Rice, *Mysore Inscriptions*, No. 45; *Ind. Ant.*, xix, p. 244.

160a. See S. I. I., i. p, 124.

to purchase it from the persons concerned and make a grant of the same. Otherwise he could make a grant only of his right over the soil. These apart, the uncultivated wastes also belonged to the king who made grants of them to people with free occupancy rights with a view to induce them to settle in such *kāḍārambam* or dry areas. Thus we get instances where the donees were permitted to cut down the jungle, form fields and introduce cultivation.[161]

There were also royal villages or *bhanḍāra grāmas*,[162] over which the kings had absolute and unlimited ownership. An inscription records for instance that Mallikārjuna Mahārāya made over to the officer of Svāti the village of Lakṣmī sāgara which belonged to the royal estate in order that it might be populated.[163] The existence of royal estates or demesnes is also referred to by foreign chroniclers like Nuniz. He mentions for instance the king's own lands.[164] Commenting on this Sewell observes: "The system is well-known in India where a prince holds what are called *khas* lands, i.e., lands held privately for his own personal use, and benefit, as distinct from lands held under him by others, the revenue of which ought to go to the public purse."[165] At times lands escheated to the king for one reason or another.[166] When a particular person was excommunicated for some offence and lost his caste, his property was forfeited to the king.[167]

Thus there existed side by side with villages in which the people were the proprietors of the soil, royal demesnes and estates, besides unoccupied estates of which the king was alone the proprietor.

161. E. C., x, Mb. 7; E. C., iii, My. 86.
162. 390 of 1920.
163. E. C., v, Hn. 16.
164. Sewell, *op. cit*,. p. 384.
165. *Ibid.*, *fn.*
166. E. C., viii, Tl, 5.
167. E. C., vi, Kp. 50.

Land Tenures

Cultivable land was either occupied or lay waste. The waste lands included hills and jungles besides the plain areas. The occupied land that belonged to the State may be classified under two heads :–

1. The *bhaṇḍāra* or *kara* or revenue villages, and
2. lands alienated to others for some purpose.

The latter head again admits of a two-fold classification based on the nature of the alienation. One was of a beneficial character made in the name of religion and charity without the expectation of any service from the donee while the other was done in consideration of service rendered or expected of the one in whose favour the alienation was made. The religious impulses of the rulers resulted in numerous grants to temples and *maṭhas* while their respect for learning made them make gifts to Brahmans and other learned men. Such assignments of land made by the king and his subordinates in the name of religion and charity were usually from the lands that belonged to the king or his subordinates. Public service was largely remunerated in those days by assignments of lands or land revenue instead of payment in cash. Further in the days of incessant warfare a large army was required ever ready for wars and a body of feudal men-at-arms or *nāyakas* were called into existence by grants of land in proportion to their importance and the number of retainers they were expected to bring into the field.

Beneficiary tenures (religious)

The beneficial tenures of a religious character may be classified under three heads in accordance with the person or institution to whom the grant was made :—

1. *Brahmadeya*,
2. *devadāna* or *devadāya*, and
3. *maṭhāpura* lands.

The *brahmadeya* was a grant or perquisite appropriated to Brahmans. Tha grants were in the form of small lands or whole villages, made usually in recognition of a Brahman's scholarship or to enable him to impart regular religious or secular instruction to others. If it was for the latter purpose, the grant was usually known as *srotriyam*,[168] *bhaṭṭavṛtti*[619] or *adhyayanavṛtti*.[170] Individual scholars were honoured by the grant of villages. Thus Mallikārjuna Rāya honoured one Āditya Rāya a Brahman scholar, learned in the Vedas, S'āstras, Purāṇas and the six systems of philosophy with the grant of a village.[171] The Vijayanagar inscriptions are replete with instances which show that such grants were made very often.[172] There were two types of such grants, the *mānyams* and the *sarvamānyams*. While the former were subject to a small quit rent, the latter were usually immune from the payment of any tax to the government. Even in the *sarvamānyams* there were two types of tenure, one the *ekabhogam*[173] and the other the *gaṇa bhogam* or *agrahāra* tenure.[174] Under the first system the donee was to be in full and unlimited possession of the land granted and had the sole and entire right of enjoyment of the property. The donee need not share his right with any one else. If the terms of the grant allowed it, he could sell it to others. But if the terms of the grant would not allow it, he could sell to others, if it was necessary, only the right of enjoyment of the fruits from the lands. One Rāmacandra Dīkṣita was granted a village as *sarvamānya* on *ekabhogam* tenure by Acyuta Rāya to be enjoyed by him and his descendants but he divided part of the land among the Brahmans of his sect.[175] Evidently he parted only with the right of enjoyment of the fruits accruing from the land.

168. E. C., vii., Sh. 71.
169. *Nel. Inss.*, iii, Podili. 34.
170. 21 of 1890; S.I.I., iv, No. 344
171. E. C., vi, Pg. 69.
172 C. P. 7 of 1922-23, etc.
173. Rice, *Mysore Inss.*, No. 135.
174. J.B.B. R.A.S., xii, p. 347, 11. 87 *ff.*
175. E. I., xiv., p. 313.

Similar appears to have been the case with one Timma Bhaṭṭa, who, in Holakere, divided into thirty-two portions the land granted to him and bestowed half of it on others, reserving the other half for himself. The *gaṇa bhogam* tenure was one according to which a whole village was granted to a body of persons to be enjoyed by them jointly, each having a right over a certain number of *vṛttis* as specified in the original grant.[176]

The *devadāna* or *devadāya* or *tirunāmattukkāṇi* lands were those granted to temples for carrying on daily worship and festivals.[177] The *maṭhāpura*[178] lands were those granted to the *maṭhas* for their maintenance, promotion of study and spread of their respective theologies. Some of them granted to S'aivācārya *maṭhas* were at times known as *s'aivācārya kṣetras*.[179] All these were subject to the payment of a small quit rent unless otherwise specified in the grant.

Service tenures

Service tenures may be classified under two broad heads, viz., military and civil. The most important of the military tenures was known as the *nāyankara* or *amaranāyaka* tenure. Dr. Maclean defines an *amaram* grant "as a grant of land by the prince or poligar on condition of service generally military or police."[180] According to this system prevalent in the Vijayanagar Empire the king divided the country into provinces and districts and granted each to a nobleman on terms of military service. The *nāyakas*, as these holders of military fiefs were called, ruled over the territories granted to them in return for which they discharged two functions. Firstly they made a financial contribution to the Government, which according to Nuniz was usually one-half of their revenue, and maintained

176. J.B.B. R.A.S., xii, p. 357, l. 120; see also Rice, *Mys. Inss.*, No. 135, p. 246
177. 375 of 1923; 25 of 1925; Rice, *op. cit.*, No. 131, p. 235.
178. 213 of 1924; 232 of 1929-30; 27 of 1927-28.
179. 44 of 1933-34.
180. *Manual of Administration*, iii, pp. 24 and 352.

for the king a fixed number of troops. They were the guardians of the peace within their jurisdiction and were made responsible for the detection of crimes, and liable to make good any loss within their jurisdiction. On certain ceremonial occasions like the birth of a son or daughter to the king, or his own annual birthday, these nobles offered him great presents of money and jewels of price. Failure to conform to the obligation was liable to be punished with confiscation of their lands and the meeting out of other punishments. Barbosa even says that they were administered corporal punishment.[181] The king transferred to the *nāyakas* what rights he had over the soil in return for financial and military contribution. The *nāyakatana* was therefore an office and nothing more. It appears that though the grant of the *nāyakatana* was personal it became hereditary in course of time. Though normally the grant of land for the office of the *nāyaka* and the *nāyakatana* itself could be resumed by the king if the *nāyaka* failed to perform the stipulated services, there was nothing to prevent the grantor from resuming them at his will. Though this system reminds us of the feudal organisation of mediaeval Europe it fell short of it in many important respects. The main point in which it differed from the feudal system was in its political character. The lands held by the *amaranāyakas* were sometimes known as *amaramāgaṇi*[182] or *amaramāyaḷi*.[183]

Persons holding certain offices in the villages which required permanent and continuous service were remunerated by grant of lands. Such were the village servants, goldsmith, potter, barber, astrologer, carpenter, physician and others.

Performance of specific services was remunerated by the grant of land under the *umbaḷige* or *umbaḷi* tenure. An *umbaḷi* has been taken to mean a rent-free land granted

181. *Barbosa*, I, p. 209.
182. E. C., iii, Sr. 6.
183. E. C., vii, Sb. 379.

to persons for public services.[184] These were probably known also as *mānya umbaḷis*.[185] The *umbaḷis* to which we get reference in the inscriptions are the *daṇḍege umbaḷi garaḍi umbaḷi* and *sattige umbaḷi*. We do not know the exact nature of the tenure under which these *umbali* grants were made. But the following may be noted. A *daṇḍege umbaḷi* or *palaki umbaḷi* was a grant of rent-free land for the upkeep of a palanquin or for making arrangements for carrying the king's palanquin.[186] The *garaḍi umbaḷi* was a rent-free land for the maintenance of a gymnasium.[187] Likewise the *sattigi umbali* appears to have been a grant of rent-free land for the maintenance of an umbrella, apparently for the king.[188] Likewise the *kuḍaimānyam* was a piece of rent-free land granted to persons who had perhaps to hold the umbrella over the king.[189]

In the Kannaḍa districts grants of land made for a particular purpose were known as *kōḍage*, or at times as *kuḍangai*. The epigraphs of the period make frequent reference to *kōḍage* like *ratta kōḍage*, *nettara kōḍage* and *sutta kōḍage*. *Ratta kōḍage* or *ratta kuḍangai* was a piece of rent-free land given to the family of those who were unjustly killed in battle.[190] *Nettara kōḍage* was a piece of rent-free land granted for service rendered in the battle-field at the cost of life. It was granted usually to the close relations of those that fell in battle.[191] The *nesara kōḍage* referred to in an epigraph was perhaps the same as *nettara kōḍage*.[192] The *udirappaṭṭi* was also of this type.[193] The

184. Wilson, *Glossary*, p. 532.
185. E. C., x, Sd. 22,
186. E. C., vi, Mg. 8; E. C., x, Mr. 87; E, C., x, Sd. 15; 371 of 1917; M. A. R., 1929, No. 32, etc.
187. M. A. R. 1929, No. 2.
188. M. A. R,, 1929, para 100.
189. 82 of 1934-35.
190. E. C., ix, Ht. 103; 336 of 1931-32.
191. E. C., vii, Ci. 69; E. C., viii, Sb. 489; E. C., iv, Cn. 130; E. C., ix, An. 71.
192. 58 of 1917.
193. 49 of 1933-34.

exact nature of the *sutta kōḍage* is not however clear, though we get occasional reference to it.[194] The *dayirya kōḍage* was probably a rent-free land for some brave service either in war or in the cow raids which were pretty frequent in the Vijayanagar days. The tenure of the *mukhāsa* villages was of a special character. We hear for instance that a whole village was held by an individual in return for which he was required to maintain horses for the king.[195]

The work of the supply of water to the villages was usually remunerated by the grant of *nīrkūli sarvamānyam.*[196] The *kākkunāyakavilāgam* and the *kāvalkāṇi* were probably different names given to the same tenure by which the duty of policing was remunerated.[197]

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194. E. C., iv, Hg. 97.

195. 216 of 1913.

196. 129 of 1918.

197. 28 of 1890; 100 of 1984-85.

CHAPTER III

INDUSTRIES

Though agriculture was the main rural industry in the country there were other regular industries both rural and urban, which supplied the wants of the people. Many of them were certainly widespread throughout the Empire though we cannot be equally sure that all of them were worked on a commercial scale. But one thing may be said: a comparative study of the industrial position of South India in the Vijayanagar period with that of Europe of the same period leaves on us the general impression that "in the the matter of industry, India was more advanced relatively to western Europe than she is today."[1] At the present day people in India are dependent on foreign countries for the supply of most of her requirements, including food stuffs. But the industrial organisation of the country in the Vijayanagar period was so widespread and the products were made in such abundance that the country was as a whole self-sufficient. The people needed very little of foriegn commodities; the articles of merchandise that were imported from foreign countries being largely horses and elephants used in the royal courts and the wars. The ordinary people did not have much to get from foreign countries and the articles produced in the country met their ordinary requirements. Thus production was self-sufficient in that period though modern economic theory may not applaud the ideal of economic self-sufficiency but would recommend the localisation of industries and plead for international trade and the economic interdependence of the different countries.

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1. See Moreland, *India at the death of Akbar*, pp. 155-56.

For purposes of convenience the industries that thrived in the Vijayanagar Empire may be classified under certain important heads :—

1. Agricultural manufactures
2. Mines and mettallurgy
3. Handicrafts
4. Textiles and
5. Fisheries.

1. *Agricultural manufactures*

The articles of consumption made out of agricultural produce were many and entailed different processes. One of the most important of the agricultural manufactures was sugar. According to Barbosa, it was in a powdered condition, for the people knew "not how to make it into loaves and they wrap it up in small packets as it is in powder". He estimates that an *arroba* of this sugar was worth about two hundred and forty *reis*. But Varthema, referring to Bhatkal, says that there was available at that place "a great abundance of sugar candied according to our manner".[3] Besides sugar of this kind, palm-sugar or jaggery was also manufactured in some places. It was yellow in colour and coarse, made from the palm sap. On account of its sweetness it was in great demand in the country.[4] The industry has now fast died out, except for its preparation on a small scale in some stray places. The inscriptions of the period refer to the sugarcane mills in some parts of the Empire.[5] But we have no evidence as to the existence of flour mills, even on a small scale.

Oil was an article that was produced from the raw agricultural products like cocoanut, gingelly, sesamum, and

2. Here the *arroba* may be taken as 28 lbs.; 240 *ries* were equal to 5sh. 7d, of modern English money. So the powdered sugar sold at 2 11/28 d. per lb. (*Barbosa*. I. p. 288, *fn.*).

3. *Varthema*, p. 49.

4. *Barbosa*, I, p. 185; II, p. 91.

6. E. C., ii, Ml. 65; E. C., iv, Kp. 21 and 22.

castor seeds. The oil mill or press, known in Tamil as *śekku* was usually made of stone and was worked with two bulls. The vāṇiyaṉs or Ceṭṭis who plied this industry were subjected to a tax known as *śekku kaḍamai.*

An important agricultural industry was that of dyeing of which Barbosa speaks; and among the dyes the most notable was indigo which was available in the west coast, particularly in the area round Chawl.[6] Myrobalan, which was a kind of dried fruit used in the west for dyeing purposes, also was available not only in the Coromandel but in the west coast.[7]

The cocoanut tree was important for the many agricultural industries that depended on it. Among them that of cocoanut oil has been referred to above. The other articles that were produced from it were coir, toddy, palm sugar, mat, umbrella, brushes, etc. Coir was made from the brushes of the cocoanut. The coir had to undergo different processes for being reduced into its shape. It was so strong and durable that the planks making the ship were closely sewn together with coir without the use of iron nails. Toddy was extracted from the cocoanut as well as the palm saps. This was the wine of the country and was in large demand.[8] According to Barbosa in Malabar the *Tuias* (Tiyas) were engaged in the preparation of wiṇe.[9] The toddy drawers were subjected to a tax.[10] Jaggery and palm sugar were also produced from the products of the tree. The palm leaf was used for making mats. Barbosa gives a vivid description of the other uses to which the various parts of the cocoanut palm were put. He says: "From the leaf of the tree they make many things, in accordance with the size of the branch. They thatch the

6. *Barbosa*, I, p. 161.
7. E. I., vi, p. 232; Major, *India*, p. 29; *Barbosa*, I, pp. 188-89
8. *Barbosa*, II, p. 91.
9. *Ibid.*, II, p. 60.
10. 216 of 1917; *Rep.*, para 68.

houses with them, for.........no house is roofed with tiles save the temples or palaces, all others are thatched with palm leaves. From the same tree they get timber for their houses and firewood as well, and all this in such abundance that ships take in cargoes for export."[11] They also made charcoal from the cocoanut shell close to the kernel,[12] and it was used by goldsmiths. The leaves of the fan palm or the palmyra were used for writing on as paper.[13] About the writing on palm leaf Ābdur Razzāk observes: "(It) is two yards long, and two digits broad on which they scratch with an iron stile. These characters possess no colour and endure but for a little while."[14]

2. *Mines and metallurgy*

An important non-agricultural industry that was connected with land, was mining. Though some of the important minerals were imported from without, like Ceylon which was rich in "precious stones, red, green and yellow" pearl fisheries, garnets, jacinths, cat's-eyes and other gems, Pegu which supplied rubies, topazes turquoises and some precious stones such as hyacinths, and Babylonia which supplied emerald,[15] amethysts and some other soft sapphires were found in the rivers in Malabar.[16] Besides, the important mineral that was dug out of the earth was diamond. Much of the mineral in the Vijayanagar Empire was obtained from the mines in the Kurnool and Anantapur districts and particularly Vajra Karur. Nuniz says that Adapanayaque, the lord of the country of gate, paid to the king forty thousand *pardaos* every year and that he had to hand over to the imperial treasury all diamonds above twenty *mangelins* in weight-about twenty-five carats.[17]

11. *Barbosa*, II, p. 91
12. *Ibid.*, p. 60.
13. *Ibid.*, pp. 18 and 19.
14. Elliot, *Hist of Ind.*, IV, pp. 107-08; see also *Barbosa*, II, p. 18.
15. *Barbosa*, II, pp. 217-26.
16. *Ibid* I, p, 200.
17. Sewell, *op. cit.*, p. 389.

Gracia de Orta who visited the country in 1534 A. D. says that there were two or three rocks in Vijayanagar which yielded many diamonds. He also found another diamond in the Deccan.[18] Linschoten observes as follows: "They (diamonds) grow in the countrie of Decam, behind Ballagate, by the towne of Bisnagar, wherein are two or three hilles, from whence they are digged, whereof the King of Bisnagar doth reape great profitte; for he causeth them to be straightly watched, and hath farmed them out with this condition, that all diamonds that are above twenty-five mangellyns in waight are for the King himselfe".[19] Nikitin mentions different varieties of diamonds. According to him, one was sold at five *roubles* per 'parcel', another at ten; a kind of diamond was sold for two thousand pounds weight of gold per *lokot* while the *kona* diamond was sold at ten thousand pounds of gold per *lokot*.[20]

Besides these, there were available many imitation diamonds. Barbosa says: "In India also are fabricated false diamonds, rubies, topazes and white sapphires which are good imitations of the true stones.......These stones show no difference from the true save that they lose their natural colour and there are some, of which one half has the colour of a ruby and the other half of a sapphire or topaz; some really have these colours mixed, they bore them in the middle and thread them on two or three very fine threads, and then call them cat's eyes. Of those which come out white they, make many small diamonds which differ not at all from the true, save by the touch of those practised therein."[21] In the kingdom of Calicut was found a kind of sapphire which was pale and fragile, very dark and blue in colour and only shone in the air.[22] The Government had

18. *Barbosa*, I, p. 226 *fn.*

19. Sewell, *op.cit.*, p. 399. According to Linchoten every mangeliyin was four grains in weight.

20. Major, *India*, p. 21.

21. *Barbosa*, II, p. 221,

22. *Ibid.*, II, p. 223.

such a large accumulation of diamonds that they maintained a separate diamond treasury.[23]

Next to diamond an important article that was mined was gold. Gribble observes that in the whole of the Deccan, from Mysore up to the northern limits of Hyderabad there were valleys which were rich and fertile and throughout the whole extent of which, from north to south ran a belt of gold bearing quartz which must have been extensively worked.[24] Traces of what in mining language is called *the old men* are even now found at three or even four hundred feet beneath the surface in Mysore. Where the work has been carried to a point beyond which *the old men* could not go, the yield of gold is said to be so great that they "rank among the richest gold mines in the world". According to legend the city of Vijayanagar was founded at a spot where it was revealed in a vision that there was a hidden treasure. As Gribble truly says, "it is a strange thing that throughout the whole of Indian history we frequently find the foundation of a new city or dynasty connected with the finding of a hidden treasure.........it is exceedingly possible that these hidden treasures were in reality mines, either of gold or precious stones, the existence of which was kept a profound secret".[25] There can be little doubt that the kings derived an enormous revenue from these mines.

Sewell gives a description of the use of quicksilver in gold mining. He says that the miners made a selection of the most likely looking pieces of the broken quartz and after washing them, reduced them to a fine powder with a heavy stone roller. The powder was washed and burnt and after the sulphur had been released a small globule quicksilver was introduced to take up the gold. The mixed up mercury and gold were then placed on a heated iron

23. 387 of 1920; Sewell, *op. cit.*, p. 380.
24. *A History of the Deccan*, I, p. 187.
25. *Ibid.*, p. 61.

plate. Then the former escaped in the shape of vapour while the latter remained in a pure state.[26] In the days of Jordanus gold was obtained in India the Less, the name given to the area covered by Sind and India along the coast as far as some place to the north of Malabar. The Vijayanagar sovereigns had such a large accumulation of gold that a separate golden treasury was maintained by the Government.[27]

Another metal, that was mined, was iron. It appears that the iron produced in the Empire was enough for all the demand for it, both internal and foreign; and there were many ships of iron that left the Indian shores. Iron mines were largely found in the modern Mysore State.[28] Besides, iron was produced by smelting black sand and earth in channels from hills. The ore so collected was smelted in a kind of furnace or a large fire stand called *hommal.* It is interesting to note that the digging of such ore was taxed in proportion to the quantity of iron made.[29]

The other minerals that were dug out from earth were sulphur and copper. Salt, being an article in great demand, was produced on a large scale both in the sea coast areas and in the inland portions. We have some epigraphs which refer to the making of salt in the country.[30] In the inland country salt was made from saline earth. There were definite rules laid by the Government for the removal of such earth and the making of salt. The method of preparing salt is interesting. The earth was spread on the surface of pans and water was let into them and allowed to evaporate in due course. After the complete evaporation of all the water, salt remained in crystals in the pans which were collected and marketed. The manufacture and

26. *Antiquarian Remains*, I, pp. 224-25; see also Appadorai. *Economic Conditions in Southern India., 1000-1500 A. D.*, II. p. 467

27, 380 of 1912; E. C., viii, Tl. 172.

28. Seweil, *A Forgotten Empire*, p. 388.

29. Rice, *Mysore Gaz.*, i, p. 548.

30. 41 and 46 of 1919; E. C., xi, Mk. 8 and 9.

sale of salt were subjected to taxation. In the former, the unit of taxation was the salt pan while in the latter the unit was the salt bag.[31]

The metal articles that were made in the Empire leave on us the impression that their production was marked not only by artistic skill but also by a large variety. There were many craftsmen who had specialised in their work. The more important among them were the jewellers, silver smiths, workers in ivory, carpenters and others. Though many of the articles produced were of artistic excellence it appears that they had only a narrow market, and satisfied the needs of only a few, like the temple and the court besides the aristocrats. Many of the poorer people could not have afforded the luxury of purchasing them. Further, such handicrafts appear to have been localised in a few important places, such as a pilgrim centre, a market place or an administrative headquarters.

Metal works consisted in the making of (a) jewellery (b) weapons of war and (c) household articles.

(a) *Jewellery*

The articles produced were of various kinds, for different types of them were required by different kinds of institutions and classes of persons. The jewellery articles used in temples were many and varied and among them were diadems, single neckrings, double neckrings, chest ornaments, worshipping paraphernalia, golden *prabhāvalis* and others.[32] A large number of articles of jewellery were demanded by the Vijayanagar court; and every foreign traveller who visited Vijayanagar was struck by the variety and costliness of the jewels used by the court. Ábdur Razzāk refers in glowing terms to the large throne at Vijayanagar which was made

31. E. C., v, Cn. 174; E. I., vi, p. 232.
32. 35 of 1891; 150 of 1924; 180 of 1922.

of gold inlaid with beautiful jewels and ornamented with exceeding delicacy and art, and says that Dēva Rāya II "had round his neck a collar composed of pure pearls of regal excellence and the value of which a jeweller would find difficult to calculate".[33] According to Paes the kings had "collars on the neck with jewels of gold very richly set with many emeralds and diamonds and rubies and pearls; and besides this, many strings of pearls and others for shoulder-belts; on the lower part of the arms many bracelets with half of the upper arm all bare, having armlets in the same way all of precious stones; on the waist many girdles of gold and of precious stones which girdles hang in order, one below the other almost as far down as half the thigh; besides these betls they have other jewels; and many strings of pearls round the ankles for they wear very rich anklets even of greater value than the rest. They carry in their hands vessels of gold each as large as a small cask of water; inside these are some loops made of pearls fastened with wax and inside all this a lighted lamp."[34] The ordinary people also bedecked themselves with costly ornaments. According to Ābdur Razzāk all the inhabitants of the country whether high or low "even down to the artificers of the bazaar wear jewels and gilt ornaments in their ears and around their necks, arms, wrists, and fingers".[35] The dancing girls attached to the court were rich and wore ornaments of gold emeralds, diamonds, rubies and pearls over their body.

(b) *Weapons of war*

The soldiers, horses and elephants were equally, well decorated with costly jewels. The foreheads of the horses and elephants were covered with gold or silver plates set with many precious stones. The cavaliers had both sides of their armour gilded.[36]

33. Elliot, *op. cit.*, iv, p. 113.
34. Sewel, *op. cit.*, p. 273.
35. Elliot, *op. cit.*, iv, p. 109; see also Barbosa, i, pp. 205 and 207-08.
36. *Ibid.*, pp. 276-77.

The weapons of warfare were many and among them were swords, bows and arrows, daggers, battle axes with shafts, musquets, blunder-busses, javelins, Turkish bows, bombs, spears, and fine missiles, short swords and poignards which were in girdles. The bows were plated with gold and silver and the arrows were kept feathered.[37] Besides, large shields were used by the soldiers which avoided the necessity for any armour to protect their body.[38]

(c) *Household articles*

Among the many household articles were different kinds of vessels which were usually made of copper.[39] Copper was also used on a large scale for minting coins.[40] But in the court, vessels like basins, bowls, stools, ewers and others were made of gold and silver; the rooms themselves were covered with silver plates and gold wire.[41] The bed room in the palace was furnished with seed-pearl work. In the middle of the room was the bed, the cross bars of which were covered with gold and the bed itself had all round it, a nailing of pearls a span wide. There were also cots made of ivory.[42] Ivory was used not only for ornamenting articles made of metals, but also for making articles themselves. Nuniz refers to bedsteads made of ivory and inlaid with gold.[43] The sword hilts according to Barbosa were inlaid with ivory.[44]

3. *Handicrafts*

Besides the manufacture of such articles made of metal, there were many handicrafts which flourished in the Empire. To take up first wooden articles. Though there

37. See Sewell, *op. cit.*, pp. 275-77, 304 and 328.
38. *Ibid.*, p. 328.
39. *Barbosa*, I, p. 204.
40. *Ibid.*, I, pp. 160 and 191.
41. Sewell, *op. cit.*, pp. 369-70; also 285, 289.
42. *Ibid.*, pp. 285, 286.
43. Sewell, *op. cit.*, p. 370.
44. *Barbosa*, I, pp. 141-44.

was available plenty of wood in the country we are not sure. if there was much furniture used by the people, in spite of the observation of Barbosa that there were good houses well furnished, and that in the front room of the houses there were many shelves.[45] But further evidence about the use of furniture in the Empire is lacking. Even in the palace, the kings appear to have used only cushions and carpets in their courts in preference to furniture.[46]

Vehicles of transport such as carriages and palanquins were made of wood. The use of bullocks for purposes of conveying goods and men from place to place presupposes the existence of such wheeled carriages. Paes says, while referring to a road at the capital, that through it passed "all the carts and conveyances carrying stores and every thing else."[47] Inscriptions also refer to the existence of carts in Vijayanagar.[48] The palanquins were maintained by the nobles, which privilege they enjoyed by virtue of the position they held in the Empire. Nuniz says: "All the captains of this kingdom (Vijayanagar) make use of litters and palanqueens. These are like biers and men carry them on their shoulders but people are not allowed to make use of litters unless they are cavaliers of the highest rank and the captains and principal persons use palanqueens. There are always at the court where the king is, twenty thousand litters and palanqueens."[49] There were in the palace itself many palanquins for the use of the members of the royal household.[50] There appear to have been different kinds among them such as the palanquins used on ceremonial occasions and ordinary ones.[51] The latter seem to have been used by the common people.

45. *Barbosa*, I, pp. 147-48.
46. Elliot, *op. cit.*, IV, p. 120; Purchas, *His Pilgrims*, X, 120.
47. Sewell, *op. cit*, p. 254.
48. E.C., iv, Yl. 27; *Ibid.*, vii, Sk. 118.
49. Sewell, *op. cit.*, p. 339.
50. *Ibid.* pp. 248 and 270.
51. Taylor, *Or. Hist. Mss.*, II, p. 157.

Wood was also used in the construction of ships for navigation purposes. The ships and boats were of different kinds. Big boats were made of palm trunks sewn together with threads, and were of great burden. Besides there were small boats for rowing, like *bargantins* or *fustas*; "these were the most graceful in the world, right well built and extremely light."[52] Besides there were ferry boats and basket boats in the different parts of the Empire. The *catamarans* were also largely used.

Leather goods

We do not know much regarding the manufacture of leather goods, though the foreign travellers who visited the Empire saw some people wearing shoes. Nicolo dei Conti saw that the people wore sandals with purple and golden ties.[53] Barbosa also speaks of the rough shoes used by the people.[54] Paes describes the shoes in the following words: "The shoes have pointed ends, in the ancient manner, and there are other shoes that have nothing but soles, but on the top are some straps which help to keep them on the feet. They are made like those which of old the Romans were wont to wear as you will find on figures in some papers or antiquities which come from Italy."[55] But it appears that only the rich people wore shoes. Paes observes: "The majority of the people, or almost all go about the country barefooted."[56] Nikitin and Varthema speak in the same strain.[57] Bucklers also appear to have been used by the people.

Pottery

The potter's industry appears to have been largely a rural but a wide-spread one, as it continues to be even at

52. *Barbosa*. II, pp. 107-08.
53. Major, *India*, p. 22.
54. *Barbosa*, I, p. 205.
55. Sewell, *op. cit.*, p. 252; See also Purchas, *His Pilgrims*, x, 99.
56. Sewell, *op.cit.*, p. 252
57. Major, *India*, p. 12; *Varthema*, p. 114.

the present day. The general poverty of a majority of the people made them use the coarse pots made by the potter for their household articles. Though the polished variety of pottery might have also been known, the industry as a whole was unprogressive and did not advance beyond catering to the primary needs of the people who demanded them. The potter was an important servant of the village and in return for his services received some remuneration "either in allotments of land from the corporate stock, or in fees, consisting of fixed proportions of the crop of every farmer in the village."[58] He was subjected to a tax.[59]

Masonry

The building industry was a flourishing one in the period particularly in the urban areas. Though the masses appear to have lived only in houses of mud or reeds roofed with thatch, the others, the middle classes, aristocrats and royalty lived in houses built of bricks. The houses of the nobility are said to have been after the fashion of those of the king; and there were many streets at the capital for instance with rows of such houses. The houses of the middle class people which according to Paes were more than a hundred thousand at Vijayanagar were all one-storied and flat-roofed, to each of which there was a low surronding wall.[60] Besides, the construction and renovation of temples and the execution of irrigation projects in different parts of the Empire kept the building industry active. Particularly in the construction of temples, many craftsmen were employed. The mason built the temple; and the sculptor executed the beautiful sculptures and bas-reliefs while the painter beautified the building with excellent drawings and paintings. The construction of buildings gave encouragement to the subsidiary industries

58. Wilks, *Historical Sketches of Mysore*, I, p.p. 73--74.
59. 59 of 1914, *Rep.* 1915 para 44.
60. See Sewell, *op. cit.*, p. 290; also pp. 224 and 246.

of brick-laying and quarrying.[61] It is interesting to note that for the construction of temples granite stone was brought from distant places even if it was not available in the vicinity. Engravers also recieved some encouragement since they were required to engrave inscriptions on the walls of temples, which were the public Record Offices of those days.

4. *Textiles*

The Textile industry in the country was an important one. But the internal demand for textile goods was conditioned by the climate of the country; for, on account of the dry and hot climate of the Empire the ordinary people were content with the minimum cotton clothing, and so very little wool was used.[62] About the centres and methods of textile manufacture in the country we have little information, for the foreign travellers who give us some idea of the trade in such articles are satisfied with mentioning the articles that went in for foreign trade while the Indian writers on the subject usually took things for granted.

Cotton was manufactured on a large scale at Kan-pa-mei, a city 167 miles from Calicut and identified with modern Coimbatore. Both at that place and in the surrounding area a kind of cloth, chihli (chih-li-pu) was made and was sold for eight or ten gold pieces. Besides, raw silk was prepared for the loom, dyed in different colours and woven into various flowered pattern goods, made up into pieces of four to five feet in width and twelve to thirteen feet in length. Each such length was sold for one hundred gold pieces.[63] On the east coast Pulicat was a great centre of textile manufacture where were made large quantities of printed cotton cloths "worth much money

61. The quarrying of stones was subjected to a tax called *kallayam*.(E, I., xvii, p. 117.)

62. Major, *India*, p. 22.

63. Mahnan, JRAS, 1896, p. 345

in Malacca, Peeguu, Camatra and in the kingdom of Guzarate and Malabar.'"[64] Around Goa much cotton was grown out of which very fine cloth was made,[65] and in the country round Bodial, (Budehal in the Chitaldrug division of the Mysore State) was made cloth of flax (linen).[66] Cotton thread itself was on sale in the modern Guntur district.[67] Lace was in demand and worked in looms.[68] The different communities that were engaged in the textile industry were the Kaikkōḷas, S'āliyas and occasionally the Pariahs, the last of whom, in all probability, served the needs of the members of their community.[69]

The tailoring industry was also in existence, though the climate of the country did not require elaborate dress for the people generally. The tailors catered to the requirements of the middle classes of the society, who, it cannot be denied, had a fascination for elegant dress. An epigraph of the seventeenth century refers to the *paṇa* (sectarian division) of *vastrarakṣakas* (tailors) who constituted one of the eighteen divisions of society.[70]

5. *Fisheries*

A word about fisheries. Fishery gave occupation to a good section of the population. The city of Vijayanagar got fish from rivers in large quantities.[71] In Malabar the fishermen paid four per cent daily on dried fish while they were not taxed on fresh fish; it was therefore "good cheap" and some fishermen were very rich and well off.[72] In the west coast some people lived in the winter season "on nought but fishery".[73] Linschoten observes: "Fish in India is very

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64. *Barbosa*, II, p. 132.
65. Sewell, *op. cit.*, p. 386.
66. *Ibid.*, p. 388.
67. E. I., vi, p. 232.
68. 364 of 1908.
69. 59 of 1914; *Rep.*, 1915, para 44; 293 of 1910.
70. E. I., xx, p. 90.
71. Sewell, *op. cit.*, p. 385.
72. *Barbasa*, II, p. 65.
73. *Ibid.*, II. p. 83.

pleasant and sweet," "crabs and crevishes are very good and marvellous great that it is a wonder to tell", "there are also good shads and other sorts of fishes.........also musckles and such like shell fishes of many sorts, oyster very many, specially at Cochin."[74] The Government got revenue by letting out, on a contract, fishing rights in tanks to individuals. The sum so realised was used in a majority of cases for the maintenance and repair of such sources of fishery.

Method of Production and System of Payment

Regarding the production of articles, different methods appear to have been followed. Some general characteristics of mediaeval industries may be noticed here. The first thing that strikes us about them is that they were primarily a handicraft system, the processes of manufacture being usually simple, utilising only crude and inexpensive machinery. Another feature of the system was that the unit of the industry was the family, at times reinforced by a small body of outside helpers. The industry was in the household stage and centred round the craftsman, who produced articles in his own place and brought them to the market for sale. Inscriptions refer to taxes on the *manaikkuḍaiyār* and *paṟṟaḍai*[75] which indicate the existence of such small handicraft industries. It was usual under the system that the master craftsmen who were known as *ācāryas*[76] had a number of apprentices working under them. The craftsmen were able to get the raw materials nearby and it was only very rarely that they imported raw products for manufacturing purposes from a long distance. Thus the division of labour was "along lines which were longitudinal rather than transverse", and the individual workers carried through the whole work of manufacture from the acquiring of the necessary raw materials to placing the manufactured

74. Purchas, *His Pilgrims*, x, p. 287.
75. 59 of 1914; *Rep*., 1915, para 44.
76. *Ibid*.

articles in the market. Naturally therefore the output of the mediaeval manufacturer was considerably small considering the time taken and the number of hands employed. Another important aspect of the mediaeval industrial organisation was that it was stable. Since the manufacturer produced his articles only for the locality, and since there were no appreciable and frequent changes in the fashions of the people and the consequent fluctuations in the demand for goods a good balance was maintained between supply and demand. There were no alternating periods of boom and depression. Further the mediaeval handicraft workers produced only for local small-scale consumption largely owing to the lack of the means of speedy and cheap transport.

In some places the community of artisans migrated to seek work at places where they could get something. The Saurāṣṭras for instance were immigrants to Vijayanagar and Madhurai in search of habitation and employment. Likewise the Paṭṭunūlkāras were the weavers who migrated to Madhurai and found employment there. The temples encouraged the settlement of weavers in their precincts and promoted the weaving industry.

Besides, there were a large number of workmen who depended on State patronage and received their daily wages. Barbosa says that it was the custom among the Muslims and Indians that when the workmen came to begin any work they gave them a certain quantity of rice to eat and when they departed at night they gave them a *fanam* each.[77] This account is confirmed by Nuniz who describes the system at Vijayanagar as follows: "He (the king) has one thousand six hundred grooms who attend to horses and has also three hundred horse trainers and two thousand artificers namely blacksmiths, masons and carpenters....... These are the people he has and pays every day; he gives them their allowance at the gate of the palace."[78]

77. *Barbosa*, II. p. 99.
78. Sewell, *op. cit.*, p. 381.

CHAPTER IV

TRADE AND COMMERCE

Section 1

Articles of Trade

The prosperity of a country depends largely on her trade. From the writings of the foreign chroniclers who visited the country we get a glimpse of the vigorous trade, South India continued to drive in the Vijayanagar days. Their accounts regarding the trade of the region bear out with remarkable force the words of Gibbon that the "objects of oriental traffic were splendid and trifling", thus showing that there was no great change in the course of the foreign trade of the country during the Vijayanagar days. The trade of the country was largely dominated by the merchant or the trade guild.

Imports

The articles that went into trade during the period may be brought under two heads, imports and exports. Though the country was fairly self-supporting during the period she was in need of certain kinds of foreign goods to meet the demands of particular classes of people.

The foreign goods that were in demand may be classified under some broad heads :—

(a) Necessaries of the Government
(b) Raw and finished materials and
(c) Luxuries

(a) *Necessaries of the Government*

In this class may be mentioned gold and silver that were imported from outside. Though some quantity of

gold was mined in the country itself, much was imported for purposes of coinage and display among the royalty. Gold was imported into India from Aden, Melinde, Berbera in Africa and from China. Silver was imported from the East also.[1] Quicksilver, tin, lead, copper and iron were some other articles that were imported in some measure. All of them met in a large measure the needs of the State.

There was great demand by the Government for elephants and horses which played an important part both in the wars of the period and in the royal paraphernalia. The countries which supplied elephants were Ceylon and Pegu. The king of Ceylon who appears to have had a monopoly of the elephant trade, sold them to the merchants of the Coromandel coast, Vijayanagar, Malabar, Deccan and Cambaya, who went there to buy them.[2] The best among the trained elephants were then worth a thousand or a thousand five hundred *cruzados* while some others cost four or five hundred according to their training.[3] Ābdur Razzāk says that Dēva Rāya II had more than thousand elephants "lofty as hills and gigantic as demons".[4] According to Paes Kṛṣṇadēva Rāya had eight hundred elephants attached to his person.[5] Besides, the animals were kept in large numbers by the provincial governors also for military purposes. Though elephants were available in North India the reason why the Vijayanagar kings imported them largely from Ceylon is not clear. Perhaps there were two reasons for it; for one thing, the Ceylonese elephants were of a better breed; and for another, the existence of the Bahmani sultans who were on inimical terms with the Vijayanagar sovereigns stood in the way of the importation of the animals from North India. Pegu

1. *Barbosa*, I, pp. 47, 56, 130 and 202-03.
2. *Ibid.*, II, p. 113; Elliot, *op. cit.*, IV, p. 111
3. *Ibid.*, II, p. 115.
4. Elliot, *op. cit.*, iv, p. 105.
5. Sewell, *op. cit.*, p. 281.

also had a large share in the supply of elephants to Vijayanagar.[6] Elephants were also bred at the capital. Ábdur Razzāk informs us that between the first and second *enceinte* of the city and between the northern and western faces, the breeding of the elephants took place where the young ones were produced.[7]

Another important animal that was imported from outside was the horse which was in great demand both for State paraphernalia and for military purposes. The Carnatic horses were weak and lean and not able to bear fatigue and hence the kings were keen on having a regular supply of good horses from foreign countries.[8] The foreign policy of the kings was therefore largely influenced by their anxiety to secure a good supply of horses. According to Nuniz, Sāḷuva Narasimha "took them dead or alive at three for a thousand *pardaos*, and of those that died at sea, they brought him the tail only for which he paid as if it had been alive."[9] The same chronicler says that Kṛṣṇadēva Rāya purchased every year thirteen thousand horses of Ormuz and country breds of which he chose the best for his own stables and gave the rest to his captains.[10] At the beginning of the sixteenth century more than two thousand horses were imported from Arabia alone.[11]

Till about the commencement of the sixteenth century the horse trade was largely a monopoly of the Muslim merchants of Ormz.[12] But early in the sixteenth century the Portuguese entered the commercial life of the country and practically drove out the Arabs and the Muslims from the market. In 1514 Kṛṣṇadēva Rāya proposed to Albu-

6. *Barbosa*, II, pp. 155-56.
7. Elliot, *op. cit.*, IV, p. 109.
8. Scott, *Ferishta*, I, p. 118; Sewell, *op. cit.*, p. 72.
9. Sewell, *op. cit.*, p. 307.
10. *Ibid.*, p. 381.
11. *Barbosa*, I, p. 94.
12. *Barbosa*, Stanly, p. 90.

querque to send him ten thousand horses annually for twenty thousand pounds which was however rejected by the Portuguese Viceroy on the ground that such an agreement would adversely affect their trade in the country. But some time later he offered to the Rāya that he would refuse the supply of horses to the Ādil Ṣhāh if he would pay him thirty thousand *cruzados* per annum for the supply and send his own servants to Goa to take the animals.[13]

The price of horses appears to have varied from time to time and depended on their breed. According to Varthema the price of horses ranged from three hundred to eight hundred *pardai*,[14] while according to Barbosa it was between four to six hundred *cruzados*[15] and the horses specially chosen for the king's use cost nine hundred to thousand *cruzados*.[16] Nuniz also gives diffierent prices for them. In one place he says that they were purchased at four and three-fourth horses per thousand *pardaos* while in another place he observes that they sold at the rate of of twelve to fifteen for a thousand *pardaos*.[17] Dames suggests from such figures that the price of the horse varied between seventy eight and twenty six pounds or one thousand one hundred and seventy and three hundred and ninety of Indian rupees.[18]

(b) *Raw and finished products*

Among the different raw products that were imported were spices like cloves, cardemam and cinnamon which came from Sumatra, Moluccus and Ceylon. They were in large demand on account of their better quality as compared with those produced in the country.[19] Malacca, Borneo, China and Bengal exported to the Coromandel in Moorish

13. Sewell, *op. cit.*, p. 127; Heras, *Aravidu Dynasty*, I, p. 59.
14. *Varthema*, p. 126.
15, *Barbosa*, I, p. 210.
16. *Ibid.*, I. p. 210.
17. Sewell, *op. cit.* p. 361, and *fn.*, 381.
18. *Barbosa*, I, p. 210 *fn.*
19. Vasco da Gama, *the First Voyage*, p. 77; Major, *India*, pp. 7-8.

ships many kinds of spices and drugs among which were aloe wood, camphor, frankincense, etc.[20] Borneo and Sumatra supplied a good part of the camphor needed in the Empire. It was so much esteemed by Indians that it was "worth its weight in silver. They carry it in powder in cane tubes to Narsyngua, Malabar and Daquen".[21] "One pound weight of that of camphor from Borneo is as dear as a hundred pounds of China *camphire*. But the Indians who knew how to mix them, adulterate the best, as they do all other merchandise being as dexterous at that work as any people in the world; so that one must be very cunning, and have a great deal of experience not to be deceived."[22] Opium was imported from China.[23] The perfumes that were imported into the country were saffron, rose water, and musk, the former two from Jedda and the last from Ava.[24] The metals that were imported were copper, quicksilver, gold, silver, lead, iron and tin. The places that supplied these articles were Jedda, Aden, Mecca and a few others.[25]

Finished articles like brassware from China were in demand by the Muslims. Good varieties of scarlet cloth, camlets, taffetas and silk were imported at Calicut from Jedda, Aden and other places. Silk was imported from China also.[26] Among the articles of merchandise that went every year from Goa to Vijayanagar, were velvets, damasks and sathens, armesine or Portugal and pieces of China.[27] Velvets came from Mecca also.[28]

(c) *Luxuries*

The articles of luxury that were imported into the country were precious stones which were in great demand

20. *Barbosa*, II, p. 125: Danvers, *The Portuguese in India*, I. pp. 358-59.
21. *Ibid.*, II, pp. 207-08.
22. *Dr. B. C. Law Volume I*, p. 110.
23. *Barbosa*, I, p. 129.
24. *Ibid.*, I, p. 130; II, pp. 159-61.
25. *Ibid.*, I, pp. 47, 202-03.
26. *Barbosa*, I, pp. 46-7, 107.
27. Purchas, *His Pilgrims*, x, p. 99.
28. Sewell, *op. cit.*, p. 276.

by the royalty and nobility. Though some kinds of pearl were produced in the country itself, several special varieties were imported from outside. Among them were precious stones brought for sale from Pegu, Ceylon and Ormuz, as also pearls and seed pearls. The precious stones circulated in the country more freely than elsewhere on account of the great esteem in which they were held in it. Ceylon also supplied rubies, sapphires, garnets and cats' eyes.[29]

Exports

From the quantitative point of view South India appears to have exported articles in excess of her imports. The countries to which they were sent were Persia, Arabia and the coasts of Africa in the west and China in the east. Besides, there was active commercial intercourse between this part of the country and Ceylon in the South and some coastal towns in Northern India. The articles that were exported from the country may be grouped under three broad heads: —

(1) Food products, spices and drugs
(2) Metals and
(3) Manufactured goods.

(1) *Food products, spices and drugs*

The most important food product that was exported to foreign countries was rice. It was available at Melinde, Aden, Ormuz and other places on the west and Ceylon in the south and was generally of the black variety which was comparatively cheap.[30] It is interesting to note that though Malabar is said to have exported rice to Ceylon and other places, it itself imported rice from Mangalore.[31]

29. *Barbosa*, I. pp. 202-03.
30. *Ibid.*, I, pp. 23, 56, 64, 178 and 188; *Varthema*, p. 192.
31. *Ibid.*, I, p. 123.

About the export of rice Barbosa observes: "Many ships from abroad, and many as well of Malabar, take in cargoes thereof, and (after it has been husked and cleaned, and packed in bales of its own straw, all of the same measure to wit, each bale containing four alqueires and a half and worth from a hundred and fifty to two hundred *reis*) take it away". Ormus had a supply of white rice.[32]

The next important article that was exported was sugar of the powdered variety, for the people did not know how to make it into loaves and hence they wrapt it up in small packets. An *arroba* of it was worth two hundred and forty *reis* more or less.[33] The other important food-stuffs that were exported to foreign countries were wheat and millet.[34] Cocoanut or the Indian nut was exported in large quantities from the ports of the west coast to places like Aden and Ormuz.[35]

The dye stuffs that were exported included cinnabar, henna, indigo, myrobalan, the last of which was available in large quantities at Bhatkal and the Malabar ports.[36] Sandalwood and teakwood both as wood and as plank were sent to foreign countries from the west coast.[37]

The exports other than food stuffs were the spices and drugs which were in great demand in foreign countries in the west and east. Pepper, particularly of the black variety, was an article that was produced for export to foreign countries and for consumption in the country itself for it was used for dressing food.[38] The pepper produced in the west coast was of an excellent variety and was in large demand in different countries and was exported

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32. *Barbosa*, pp. I, 195-96.

33. *Ibid.*, p. 188. The *arroba* may be taken as 28lbs. Dames thinks that the powdered sugar sold at 2 11/28d. per lb (*Ibid.*, p. 191 *fn.* 1).

34. *Ibid.*, p. 23.

35. *Ibid.*, I, pp. 55-56, 92.

36. *Ibid.*, I, pp. 188-89.

37. *Ibid.*, I, p. 107.

38. *Ibid.*, I, pp. 95 and 203.

from such ports as Cochin and Calicut.[39] Likewise were cloves, ginger and cinnamon. The first among them appears to have been imported into the country from Java, the Nicobar islands and the Moluccas to be exported to countries in the west.[40] Ginger was grown in large quantities in the west coast and exported to foreign countries. There were two broad varieties of it, the green ginger and the dried ginger, both of which were in demand. The process of drying it was to cast ashes on it and dry it in the sun for three days by which time it would become dry.[41] Ginger was shipped from the ports of Calicut, Cannanore, and Mangalore to countries like Persia and Yemen.[42] Cinnamon was a product largely of the west coast though a better variety of the article was imported to Malabar from Ceylon to be re-exported to foreign countries.

(2) *Metals*

The important metal that was exported to foreign places like Ormuz from Bhatkal was iron.[43] Among the precious stones that were exported to foreign countries like Arabia were carnelian, cats'eye, garnet, pearls, rubies, sapphires, giagonzas, amethysts, topazes, chrysolites and hyacinths.

Manufactured goods

(3)The finished products that were exported from the country to Ormuz and other places were cotton cloths and porcelain articles.[44] The Portuguese bought cloth from the Vijayanagar merchants at Ankola and Honavar.[45] Pulicat and Mylapore exported a large qnantity of printed cloth to Malacca, Pegu and Sumatra.[46]

39. *Barbosa.*, II, p. 215.
40. *Ibid.*, I, p. 92; II, 227-28.
41. Major, *India*, p. 6.
42. *Barbosa*, I, p. 195.
43. *Ibid.*, I, p. 188.
44. *Ibid*, I, pp. 53-56.
45. Heras, *Aravidu Dynasty*, I, pp. 62-63.
46. *Barbosa*, II, p. 132,

The kinds of Calico cloth made in the Vijayanagar Empire were *tzinde* (silk cloth with red stripes), *patta katuynen* (cloth with red stripes), *dragon* (black and red cloth), *sallalo*, (blue and black cloth) *bastan* (white and black cloth, starched and folded up four square), *kassa* (white unstarched lawns), *kreyakam* (red starched cloth), *kanteky* (black starched cloth), *toorya* (painted unstarched coarse cloth) *paw* (silk cloth with frings on the end.) etc. They were exported to Bantam and other places in return for cloves.[46a]

Though the above were largely the articles that entered trade either as exports to foreign countries or as imports from them, there were a good number of articles of inland trade. We have however no clear description of them except the casual references made in the epigraphs of the period and the writings of the foreign travellers who visited the country. The Koṇḍavīḍu inscription of Nādīṇḍla Gōpa gives a list of the articles of inland trade. It included many articles of food (with the exception of rice) such as pulses, millets, ragi, wheat, vegetables, salt, tamarind, spices like pepper, cloves, nutmeg, mace, etc., cocoanut, ghee, oil, jaggery, sugar, betel leaves and arecanut, dyes such as dammer and gall nuts, fruits, metals such as iron, lead, tin and copper, raw materials such as cotton, cleaned and uncleaned, manufactured goods like steel, chisels, cotton-thread and gunny bags.[47] Animals like pack-horses, bullocks and asses were also on sale.[48] Vijayanagar was a well provided city stocked with provisions of rice, wheat, grains, Indian corn and a certain amount of barley and beans, green gram, pulses, horse-gram and many other seeds which were grown in the country.[49] Thus the articles of inland trade were many. They were sold both in the bazaars and in the *santes* or fairs which were held regularly on fixed days throughout the year.

46a. See *B. C. Law Volume*, I, p. 125.
47. E. I., vi, pp. 232-39; E. C., iii, Ml. 95; Nj. 118; E. C., v, Cn. 174.
48. 18 of 1915.
49. Sewell, *op. cit.*, p. 257.

Section 2

Commercial Communities

Arabs and Muslims

The flourishing trade of the country was carried on by some commercial communities both foreign and indigenous. Among them the Muslims were important. By slow process and with the advance of time they established themselves permanently on the soil and made for themselves a business influence. By the beginning of the fifteenth century there was a good Muslim population at Calicut.[50] Likewise the other cities on the west coast had each a good Muslim population.[51] Vijayanagar had a Moorish quarter and it is possible that many inland cities also were well peopled with Muslims. Some influential Muslim businessmen had agencies in different parts of the country. Thus the Muslim merchants of Calicut appear to have had their agents at Mangalore and Basrūr.[52] The Muslims also maintained many ships of their own and carried on extensive trade till the Portuguese took their place in the west coast by the beginning of the sixteenth century.[53] Shaykh Zaynu'd-Dīn, the author of the *Tuḥfat-al-Mujāhidīn*, gives a good description of how the Portuguese drove out the Muslims from active commercial life in the west coast. According to him the Portuguese established their power in a large number of ports over which they held their sway by openning trade factories in them. "Their trade was flourishing in these ports, and elsewhere, while the Muslim merchants in these places were humbled and made to submit to the Portuguese as slaves. The Muslim merchants were not permitted to trade except in goods for which the Portuguese had little interest. The commodities in which the Portuguese had interest yielded large profits.

50. Mahuan, JRAS, 1896.
51. *Varthema*, p. 114.
52. Sturrock, *South Canara Manual*, I. p. 68.
53. *Barbosa*, II, p. 126.

They assumed the right of exclusive possession of the trade in such commodities, and it was not possible for others to encroach on their rights. Their monopoly started with pepper and ginger but gradually they added to the list cinnamon, clove, spice, and such other articles which yielded large profits. The Muslims were forbidden to do business in all these articles and to undertake sea-voyages for trade purposes to the Arabian coast, Malaqa, Ashi, Danasri and other places. Thus there remained nothing for the Muslims of Malibar, but the petty trade in arecanut, cocoanut, clothes and such other things..........The journey by sea was not possible for the Muslims except under the protection of the Portuguese and with their passes........... There was little traffic on sea for the Muslims and their carrying-trade was through the ships of the Portuguese."[54] But the Muslims continued to retain some hold and influence in the commercial life of the east coast. They continued to bring goods from China, Malacca and Bengal and supply them to the people. The coastal trade of South India was largely controlled by them. The arrival of the Portuguese adversely affected only the fortunes of the Arabs on the west coast of India.

Portuguese

The commercial history of South India attained a new phase with the coming of the Portuguese to the country at the beginning of the sixteenth century and the establishment of their settlements at places like Goa and Diu. As said above, they practically drove out of the market the Arabs who had a monopoly of the trade in horse in South India till then. The portuguese gradually became masters of the trade of the coast to the exclusion of the Arabs and Moplahs and collected a kind of tribute in grain from all the ports on the west coast. Thus Barcelor had to pay annually five hundred loads of rice, the ruler of Barakūr one thousand, the ruler of Carnad near Mulki eight hund-

54. *Annals of the Oriental Research Institute, (Madras University)*, VI, No. 1.

red, the ruler of Mangalore two thousand loads of rice and thousand of oil, the ruler of Manjeshwar seven hundred loads of rice and the ruler of Kumbla eight hundred.[54a] Kṛṣṇadēva Rāya who was frequently at war with the Ādil Shāh of Bījāpūr availed himself of the opportunity to get a large supply of horses on monopolistic terms from them. In 1511 he sent an embassy to the Portuguese Viceroy at Goa and expressed his desire to get through them horses from Arabia and Ormuz of which he was in dire need. The Viceroy expressed his willingness to send him all the horses available at Goa rather than to the Sultan of Bījāpūr. Three years later the Emperor sent another embassy under the leadership of one Retilim Cherim (Cetṭi), Governor of Barcelor (Basrūr) and offered the Viceroy twenty thousand pounds for the exclusive right of buying thousand horses; but the offer was rejected by the Portuguese Viceroy on the ground that it would destroy their trade in the country. However when the Ādil Shāh of Bījāpūr made a similar tempting offer to the Portuguese, Albuquerque informed Kṛṣṇadēva Rāya that he would exclusively supply him with all the horses if he would pay him thirty thousand *cruzados* per annum for the supply and send his own servants to Goa to fetch them.

During the early years of Sadāsiva Rāya's reign the relations between the Vijayanagar king and the Portuguese were not cordial. But early in 1546 Sadāsiva Rāya swore eternal friendship to the king of Portugal and promised that he would never wage war against the provinces of Salsette and Bardez which were given away to them; and in 1547 Rāma Rāja sent an ambassador to the Viceroy of Goa to confirm on behalf of his master the treaty of alliance proposed in the previous year. Subsequently the ambassador met two other officers appointed by the portuguese Government as a result of which the following treaty was concluded:

54a. *South Canara Manual*, I, pp. 68-9.

"Both parties, the King of Portugal and the King of Vijayanagara, oblige themselves to be friends of friends, and enemies of enemies, each of the other; and, when called on, to help each the other with all his forces against all kings and lords of India, Nizām Shāh always excepted.

"The Governor of Goa will allow Arab and Persian horses landed at Goa to be purchased by the King of Vijayanagara; none being permitted to be sent to Bījāpūr nor to any of its parts; and the King of Vijayanagara will be bound to purchase all those that were brought to his ports on quick and proper payment.

"The King of Vijayanagara will compel all merchants in his Kingdom trading with the coast, to send their goods through Onor (Honāvar) and Barcelor (Basrūr) wherein the King of Portugal will send factors who will purchase them all; and the Governors of India will be forced to send the Portuguese merchants there in order to buy them. In the same way, the King of Vijayanagara will forbid the exportation of iron and saltpetre into the Kingdom of Ādil Shāh from any port or town of his own; and his merchants will be compelled to bring this merchandise to the harbours of this Kingdom of Vijayanagara, where they will be quickly purchased by the Governors of India, not to cause them loss.

"All the cloths of the Kingdom of Vijayanagara will not be brought over to the ports of Ādil Shāh, but either to Ankola or to Onor (Honāvar); and in the same way the Governors will bind the Portuguese merchants to go there to purchase them, and to exchange them for copper, coral, vermillion, mercury, China silks and all other kinds of goods which come from the Kingdom; and he, the King of Vijayanagara, will order his merchants to purchase them.

"The King of Vijayanagara will allow no Moorish (Muslim) ship or fleet to stop in his ports; and if any should come he will capture them and hand them over to the Governor of India whosoever he may be.

"Both parties agree to wage war with Ádil Shāh; and all the territories taken from the latter shall belong to Vijayanagara, except lands to the West of the Ghats from Banda to the Chintakora river, which lands did long ago belong to the ownership and jurisdiction of Goa and will remain attached for ever to the Crown of Portugal."[54b]

Though the relations of the Portuguese with the Vijayanagar sovereigns were one of apparent harmony, their relations with some of the feudatories of the Empire were not always cordial. They had frequent wars with the rulers of Bhatkal and Ullal.[55] In 1558 there arose a small quarrel between the Portuguese and Rāma Rāja himself leading to the latter's invasion of Mylapore where the Portuguese had made a settlement. Likewise there were quarrels with the Portuguese on the fishery coast in the far south in which they sustained reverses.[56] In spite of such small skirmishes between Vijayanagar and the Portuguese, the good relations subsisting between Rāma Rāja and the Portuguese were not very much disturbed. San Thomē continued to be a flourishing trade centre even at the end of the reign of Sadāsiva.

Referring to this happy state of affairs Caesar Frederick observes: "It is a marvellous thing to them which have not seene the lading and unlading of men and merchants in Saint Tome as they doe". This place traded particularly with Pegu and Bengal, with the former in gold and sealing wax and with the latter in eatables, particularly sugar. The fine cloths produced in the Coromandel were in great demand in Portugal. In the month of September the Portuguese used to send to Malacca a ship laden with these coloured cloths which obtained for them a great quantity of money.[57] The trade between the city of Vijayanagar itself and Goa was also great. The Italian traveller Philippo Sassetti says: "Large quantities of goods that came from our possessions

54b. Heras, *Aravidu Dynasty*, I, pp. 62-3.
55. Sewell, *op. cit.*, pp. 185 and 187; Heras, *op. cit.*, pp. 187-90.
56. *Ibid.*, pp. 150-62.
57. Purchas, *His Pilgrims*, x, p. 109; Heras, *op. cit.*, 69-70.

via Alexandria and Soria were then consumed and all the cloths and linen, which were made in such a large quantity could be disposed of there. The traffic was so great that the road going from here (Goa) to that town was always as crowded as the roads leading to a fair, and the profit was so sure that the only trouble was to bring the goods there. Anything that was carried there by the merchants after a fortnight of walking, was sold there with a profit of twenty-five or thirty per cent. Besides they came back with other merchandise, diamonds, rubies, pearls. In these things the profit was even greater. And finally the tax on the horses that came from Persia to go to that kingdom yielded in this town a hundred and twenty or a hundred and fifty thousand *ducats*."[58]

But the Hindu defeat at Rakṣas Tangdi struck a rude blow at the prosperity of the Portuguese trade. The Portuguese commerce which was very extensive and paying was shattered because of the political effects of the battle. Since then the Portuguese trade declined. Couto gives a doleful picture of the results of the battle on the commerce of the Portuguese. He says: "By this destruction of the kingdom of Bisnaga, India and our State were much shaken; for the bulk of the trade undertaken by all was for this kingdom to which they carried horses, velvets, satins and other sorts of merchandize by which they made great profits; and the Custom House at Goa suffered much in the revenues so that from that day till now the inhabitants of Goa began to live less well; for baizes and fine cloths were a trade of great importance for Persia and Portugal and it then languished and the gold pagodas of which every year more than five hundred thousand were laden in the ships of the kingdom, were then worth seven and a half Tangas, and today are worth eleven and a half and similarly every kind of coin."[59] Caesar Fredrick who visited the country just

58. Heras, *op. cit.*, p. 71 and *fn.* 1.

59. Dec. VIII. C, 15, quoted by Sewell, *op. cit.*, pp. 210-11.

two years after the battle also gives a good account of the loss Goa had sustained in trade on account of the set back Vijayanagar suffered at the battle. He says that the country was so infested with thieves that he was forced to stay at Vijayanagar for six months more than he had intended to.[60] Philippo Sassetti also remarks that the trade between the two cities had completely perished; and referring to the loss the Portuguese sustained, he remarks: "The revenue of the tax on the horses that came from Persia for Vijayanagara was from a hundred and twenty thousand to a hundred and fifty thousand *ducats*; and the present revenue does not reach even six thousand".[61] The Portuguese king was not prepared for this sudden fall for he wrote early in 1568: "If the merchandise that comes from Cannanor, Cochin and other places, to be sold in Narasinga (Vijayanagar) passes through Goa, the revenue derived from the tariff duties on them will be a great service to me."[62] Heras justly observes: "The Portuguese sovereign was never to see the finances of his 'State of India, increased by the commerce with Vijayanagara; the Portuguese trade in that city had perished for ever."[63]

The Portuguese continued to stay on in the Empire trying to spread the tenets of their religion and painting figures for the kings, particularly Venkaṭa II though they acquired some small settlements at certain places like Nāgapaṭṭiṇam (1612). But they slowly lost their influence in the Vijayanagar court at Vellore and Candragiri; and they were recalled by Philip III of Spain who suspected the behaviour of the missionaries that stayed with the king.

Dutch

The close of the sixteenth century and the commencement of the seventeenth were marked by the appearance of the Dutch, Danes and the English on the east coast of

60. Purchas, *His Pilgrims*, x, pp. 98-99.
61. See Heras, *Aravidu Dynasty*, I, p. 240, and *fn*. 2.
62. *Ibid*.
63. *Ibid*.

India for a share in its commerce and the break up of the monopoly enjoyed in it by the Portuguese so far. Up to 1587 A. D. the monopoly of the Portuguese commerce was practically in the hands of the government. But in that year it was handed over to a quasi-commercial company called the Portuguese Company of India and the East, which in 1630, gave place to the Commercial Company.

The Dutch who came to know about India and her commercial products fitted out between 1595 and 1602 A. D. as many as fifteen expeditions to the east. In 1602 A. D. all the Flemish companies were amalgamated into a united company and an expendition was sent to find out a suitable trading centre. Towards the close of 1608 they got an *olla* from Kṛṣṇappa Nāyaka of Jiñji for establishing a factory at Dēvanāmpaṭṭiṇam near modern Cuddalore in the South Arcot District. But there was great rivalry between the Portuguese and the Dutch, who "worked havoc to the Portuguese ships in the sea" but on land the Portuguese endeavoured by clandestine efforts to prevent the Dutch from getting a foothold. They also tried to found a factory at Triminipatan (Tirumalairājanpaṭṭiṇam) in the Tanjāvūr District. While the Dutch were building a factory at Dēvanāmpaṭṭiṇam, Venkaṭa II the Emperor of Vijayanagar interfered on behalf on the Portuguese and ordered Kṛṣṇappa Nāyaka of Jiñji to expel the Dutch from the place. After three such repeated orders the Dutch were expelled from there.[64]

But some two years earlier the Dutch had got a *cowle* though with some difficulty, from Venkaṭa II to build a fort of stone at Pulicat to keep all kinds of war ammunitions, powder, lead, bullets, anchors, ropes, sail and all other kinds of merchandise to save it from fire, robbers and other accidents on condition of their paying two per cent on the goods and merchandise brought into it for trade

64. See T. I. Poonen, *The Dutch Beginnings in India*, (Madras University), ch, vii.

purposes, it being understood that what had been paid once need not be paid a second time and that rice and other necessities for the house had not to be paid for. The Emperor promised not to allow any other European nation to trade at the place. The Dutch on their part agreed to pay according to the agreement all painters and weavers who would make or paint cloth or sell linen there and promised to sell the king whatever goods, guns, war ammunition or such other things of theirs as were desired by the king for the price "they cost in our countries".

The Portuguese considered the Dutch as a menance to their prosperity and hence about the close of 1612 or early in 1613 attacked them and razed to the ground their fort at Pulicat. But in 1614 the Dutch reoccupied the place, getting permission from Venkaṭa II through the influence of Ōbi Rāju, the brother-in-law of the Emperor, for re-establishing themselves there. A new fortress was erected at Pulicat, but at a different spot which commanded greater facility for defence. Further the fort was strengthened by the erection of several bastions round the walls and the picketing of artillery and soldiers. The newly constructed fort was called 'Castle Geldria'.

In 1619 A. D. under a treaty between the Dutch and the English concluded between James I and the States General, the English were allowed to erect a factory at Pulicat along side of the Dutch on a joint account. Under this new arrangement the Dutch and the English agreed to a sort of partnership in the Far East, the English to have one-third of the trade in Moluccas and one-half of the Bantam pepper trade, and both parties to unite in providing a fleet for defence against the Spaniards and the Portuguese. According to the seventh article of the Treaty of Defence "the English Companie shall freely use and enjoy traffique at the place of Pellicate and shall bear the moyette of the charge of maintenance of the fort and gar-

rison there; this to begin from the tyme of the publication of this treaty in those parts."[65] The English arrived at Pulicat in June 1621 A. D. and worked for some time the experiment of joint trade. But it was not quite successful on account of the mutual suspicion between the Dutch and the English. The Dutch Governor-General wrote to the Dutch agent at Masulipatam directing him to discontinue at Pulicat and other places the practice of buying cloth jointly with the English. He said: "We are not bound to do so by the Contract and we do not consider it advisable to bind ourselves in the matter, so do your best, without making the English any wiser than they are. We again warn you not to trust them in the least, for we find it productive of no good. It is also desirable that they should live outside rather than inside the fort. Do not let them infringe on our jurisdiction, honour, prerogative. Make them pay from month to month the half of all expenses of the fort and garrison of Pulicat and do not agree to the payment of any portion here (unless it be to your advantage). In this way we shall avoid the necessity of running after the English, and they on the other hand will have to come to us."[66] The English factors held similar suspicions. Methwold felt that the Dutch "hould us to the strick sense of all agreements, whilst themselves violate or infringe in part of all authentick and serious treatyes."[67] Mathew Duke wrote to the Company from Pulicat as follows: "I cannot but thinke they finde that trade moast profitable. But all thinges are carried by a single duble voice and not ordered by consultation; which I could wishe were otherwise, for considering that the factory of Petapoli is dissolved, wee are enow to have steered our owne course and not to saile by another man's compas. I doe not incert this caution, upon any certen ground or just cause of suspition other than common reason doth lead mee to; which is to doubt the worst, for the old fable is that wolves are often clothed in sheepes skines, and it is alwaies good to doubt the worst."[68]

65. William Foster, *The English Factories in India. 1618-,21, Intro.*, p. xiv.

66. *Ibid.*, p. 208.

67. *Ibid.*, p. 298.

68. *Ibid.*, pp. 304-305.

Thus the treaty only raised the mutual suspicions of the parties on one another and led to much heated controversy. As a consequence, the English decided to abandon their factories from the Moluccas, Banda and Amboyana. But even before the decision was given effect to, occurred the famous "massacre of Amboyana" in which ten Englishmen were charged of conspiring to capture the Dutch fortress in that island, made to undergo an irregular trial and tortured and put to death early in 1623. This abominable outrage roused the just ire of the English who gave up the idea of cooperation with the Dutch. Pulicat was abandoned by the English who retired to Masulipatam.

Danes

The successful commercial enterprises and profits of the Portuguese and the Dutch in the East paved the way for similar enterprises being undertaken by other nations of Europe like the Danes and the English. The Danish East India Company was started at Copenhagen under the patronage of king Christian IV in 1616. The Kandyan king in Ceylon was greatly in need of the Danish help to drive out the Portuguese from the island. Hence Marcellus de Bosahowver, a Dutchman, negotiated on behalf of the Kandyan king a treaty with the king of Denmark with forged credentials. In 1618 a ship was despatched to Ceylon under Roelant Crape, a Dutchman, followed some time later by four others. At the suggestion of the Kandyan king he captured some Portuguese junks laden with rice and arecanuts and passed to the Coromandel coast. The Portuguese soon attacked the Danish ship off the Coromandel coast as a result of which Roelant Crape, the Dutch Captain, made his way with a few others to Tanjāvūr where they were well received by Raghunātha Nāyaka of the place. The next batch of Danish ships reached Ceylon in 1620 under the captainship of Ove Geede. The Captain after getting the cession of Trincomali to the Danes moved on to the Coromandel coast and concluded a

treaty with the Nāyak of Tanjāvūr according to which Raghunātha ceded to them Tranquebar where they built a small fort called the "Castell". One Henrick Here was appointed commandant of the fort. Soon the Danes began to drive a prosperous trade. By 1622 A. D. the fort was strengthened since they had gained an important place in the commercial life of that part of the country.[69]

English

On 31st December 1600 A.D. some merchants of London obtained a charter from Queen Elizabeth to trade with the East and sent out expeditions in 1601 and 1604 both of which did not meet with success. In 1607 the English made a settlement at Masulipatam. A year later they tried to settle at Pulicat. The English Captain Hippon went to the place and sought an interview with one Conda Ma (Kondama) said to have been Governess of the place with a very good present with a view to get her permission to establish a factory at Pulicat. But she refused to give them audience, sent word that the place had been granted to the Dutch by Emperor Venkaṭa and suggested that they might go to him and obtain another place for themselves.[70] The English then returned to Masulipatam.

To their surprise Venkaṭa II sent an embassy to the British traders at Masulipatam with letters from Ōbammā, queen of Pulicat, Jaga Rāya, Governor of San Thomē and the surrounding country and Appa Koṇḍaja, Secretary of the Emperor suggesting to them that they might choose a place "right over against the fort of Poleacatte" which he would grant with all such privileges as they would desire besides great promises. Subsequently, the Emperor sent a *cowl* in a leaf of gold wherein he begged excuse for the former fault done to them at Vellore and granted them a town "of about four hundred pound of yearly revenue"

69. *The English Factory Records*, I, Intro. and p. 266,; II, p. 117.
70. Purchas, *His Pilgrims*, iii, p. 320.

with promise to do more at their coming.[71] They had an idea of going to Pulicat, but hearing of the death of Venkaṭa II in 1614 and the troubles consequent on that, the proposal was dropped.

But independent of that, the English made an attempt to start trading with the natives at Pulicat and to establish a commercial settlement there. However they met with no better result this time also and hence they gave up the attempt.

In 1611 A. D. the English were allowed to establish a factory at Pettapoli (Peddapalli), now called Nizampatam. The place lies between the rivers Kṛṣṇā and Peṇṇār and is situated about 70 miles to the north of Pulicat and 36 miles south of Masulipatam, where again the English opened a factory under the patronage of Abdulla, the Sulṭān of Golkonda. The place accommodated a warehouse, offices and residences for the factors, and was subject to Bantam.[72] Abdulla was merciless in his exactions and hence the English had to shift to some other place, but their attempts in that direction were foiled by the Dutch. The English therefore established factories in 1616 at Calicut and Cranganore, on the west coast under the protection of the Zamorin of Calicut. Some three years later the English, as said earlier, concluded a defensive alliance with the Dutch at Pulicat for joint trade on a partnership basis, but on account of mutual suspicions among them the contemplated joint business did not work successfully. Largely on account of this reason and the 'massacre of Amboyana' the English withdrew from the place.[73]

In 1622 one Johnson sent information to the Superior Council at Bantam that the Nāyak of Tanjāvūr was anxious to open trade relations with the English. Brickceden, the

71. Purchas, *His Pilgrims*, pp. 336-37.
72. W. Foster, *The English Factories in India, 1618-30*, Intro., p. xxxviii.
73. *The English Factory Records*, Vol. II, Intro., pp. 37 and 38.

President of the English settlements of the East and the Council at Bantam communicated the news to the Directors of the Company in England. The English Council at Bantam decided to send a ship with 'a chief factor' and four assistants. It was fixed that the stock must be fifty-two thousand *rials*, four-fifths of which was to be invested in pepper and the rest in calicos.

The British reached Karaikal with a ship and went to Tanjāvūr on an invitation from the Nāyak of the place. He promised them free trade and the grant of the port of Karaikal at an easy rate. But it appears that the Nāyak was bribed by the Danes on account of which he demanded a yearly payment of seven thousand *rials* of eight for permission to trade at Karaikal, though the English agreed to pay three thousand *rials* of eight as rent for the port. Hence being disappointed at the attempt, the English factors made their way to Masulipatam touching Tranquebar, Dēvanāmpaṭṭiṇam and Pondicherry on the way. Another reason for the return of the English from the Nāyak court appears to have been the fact that the trade of the country did not very much attract them for they found the pepper of the place to be limited in quantity and of "a very sort that always was much wet with fresh water in portage from the upland mountains". The Danes also intrigued and prevented the foundation of a factory at Karaikal by the British.[74]

Subsequently the Council at Bantam suggested to the Board of Directors in England the desirability of concentrating their attention on the trade in the Coromandel coast. Soon a small trading establishment was started at Armagon, a small place forty miles north of Pulicat through the good offices of a local chief by name Ārumuga Mudali. The place itself was called after him. Though it did not enjoy the advantages which Masulipatam did on account of its

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74. *The English Factory Records*, III, Intro. pp. 12 ff.

comparative distance from the local seats of manufacture, yet Masulipatam had to be abandoned in 1628 on account of the heavy exactions demanded by the Golkonda Sultān. Armagon was fortified with twelve mounted guns. The English factors did business at that place in cargo brought from England to be invested in piecegoods to be taken to Bantam and Maccassar. The ships returned from those places laden with pepper and spices. But the English found that their commercial needs could not be supplied on account of the smallness of Armagon as a business centre. Hence the factory at Masulipatam was reopened in 1630, two years after its abolition which satisfied the local merchants of the place. Henry Sill of Bantam was appointed agent of Masulipatam. The English soon regained their important place in the commercial life of the coast and had their factories workingin the area at Masulipatam, Pettapoli, Mōṭupalli, Armagon and Vīravasam, the last of which wasa small town eight miles to the north of the fort of Narsapur in the Godavari district.[75]

But the area soon fell a prey to a terrible famine as a result of which the "major part of weavers and washers were dead and the country almost ruinated." The Sulṭān assured the English that " under the shadow of me the King, they shall sit down at rest and in safety" in return for which, they promised to import Persian horses for him. However, as days rolled on, it was found that even the change for Masulipatam did not give them the desired result. Further the Nāyak of Armagon was not friendly to the English. Hence the Directors of the Company ordered in 1638–39 that Armagon must be dismantled and abandoned. But the English factors at the place delayed the execution of the order because they were anxious to find out a better settlement before abandoning Armagon.

Thomas Ivie, the chief of Masulipatam, passed through Armagon on his way from Bantam and authorised Francis

75. Foster, *The English Factories in India, 1630-33*, pp. 170, 262, 265 and 312.

Day, the factor of Armagon, to explore the coast for a better place. In 1637 Day appears to have gone as far as Pondicherry in search of a site and at last pitched upon "Madraspatam" three miles to the north of San Thomē. Then Dāmarla Venkaṭappa, known also as Venkaṭādri, according to the English records, was "Lord General of Carnataka" and "Grand Vizier to the King", Venkaṭa III. This Venkaṭappa and his younger brother Aiyappa belonged to to the Velugoṭi family of Kālahasti. The former was the chief of Wandiwash exercising much influence over his master Venkaṭa III and commanded an army of about twelve or fifteen thousand soldiers while the latter Aiyappa Nāyaka lived at Poonamallee and attended to the administration of the coastal area.

Francis Day secured from Venkaṭādri Nāyaka through Aiyappa Nāyaka a grant of the territory of Madraspatam besides privileges and license to construct a port and make a settlement at the place. According to the terms of the grant

1. The English could build a fort and castle "in or about Madraspatam", the charges for the first instance being met by him and then defrayed by the English on their taking possession of it;

2. The English could have full power and authority to govern and dispose of the fort of Madraspatam during the space ot two years from their occupying it;

3. The English were to receive a moiety of the customs and revenues of the port;

4. The English were to import into or export goods from Madraspatam for ever, customs free;

5. The English were to pay customs duties on goods passing through the Nāyak's territories or those of any other Nāyak;

6. The English at Madraspatam were vested with the right of perpetual free coinage;

7. The Nāyak was to make good advances by the English to merchants, painters (i. e., dyers), weavers, etc., in the said port in every case where he had guaranteed such repayments, or deliver up such persons if they be found in his territories;

8. The English at Madraspatam could buy provisions for themselves and for their ships free of all duties in the Nāyak's territories; and

9. The English could have restitution, upon demand, of everything found in ships which suffered ship-wreck in any part of the Nāyak's territories, provided they belonged to the English or any nation whatsoever which came to trade at Madraspatam.[75a]

The total length of the site granted to the English measured about three and three-fourths miles from north to south and a mile from east to west. The place gained in importance with the construction of a fort, Masulipatam falling to the background. The fort was built by the English who met the entire cost of it. "They were very hopeful of a bright future, because, in spite of the opposition of the Portuguese at San Thomē, they had so prospered in the new settlement that three hundred or four hundred families of weavers, painters and other workmen had come to live in the town planted by the north side of the fort. In fact the Directors were assured that a considerable quantity of long cloth and painted cloth and many other kinds of stuff and clothing which were in demand at Bantam and at other places in the Archipelago might be easily procured at Madras".[76] In 1646 S'rī Ranga III, who succeeded Venkaṭa III confirmed the grant to the English. This royal confirmation runs as follows:

75a. See *Mysore Gazetteer* (new Edn.), Vol. II, pt. iii, pp. 2342-3.

76. See C. S. Srinivasachari, *A History of the City of Madras*, p. 9.

"For as much as you have left Armagon and are come to Sriranga Rayapatam my town, at first but of small esteem, and have there built a Fort and brought trade to the Port; therefore, that you may be the better encouraged to prosecute the same and amplify the town which bears our name, we do freely release you of all customs or duties upon whatsoever goods brought or sold in that place appertaining (unto) your Company. Also we grant unto your Company half of all the customs or duties which shall be received at the Port, and the rents of the ground about the village Madraspatam; as also the Jackal ground we give you towards your charges, by way of *piscash.*

"Moreover for the better managing your business, we surrender the government and justice of the town into your hands. And if any of your neighbours of Poonamallee shall injure you we promise you our ready assistance. And for what provisions shall be brought out of that country we will that no junken (*sunkam*) be taken thereon.

"If it fortune that any of your Company's ships shall by accident of weather or otherwise be driven ashore at that Port whatsoever can be saved shall remain your own; and the like touching all merchants that trade at the Port, if the owner comes to demand it; but if the owner be not to be found, then our officers shall seize the same to our behalf.

"We also promise still to retain the town in our protection and not to subject it to the government of Poonamallee or any other Nayak. And whatsoever merchandises of yours that shall pass through the country of Poonamallee, to pay but half customs.

"In confidence of this our *cowle,* you may cheerfully proceed in your affairs: wherein if any of our people shall molest you, we give you our faith to take your cause into our own hands to do you right and assist you against them. And that this (your) Port and this our *cowle* may stand firm as long as the sun and the moon".[77]

77. C. S. Srinivasachari, *op. cit.*, pp. 34-35.

Native Merchants

Though the foreign trade of South India in the Vijayanagar period was largely in the hands of foreigners there were also a good number of native merchants who took an important part in it. Among them were the *Cettis* in the in the Kannaḍa, Telugu and Tamil countries who were all enterprising businessmen. The articles in which they dealt were pepper, which, they bought from the farmers when it was ripe and sold to foreign ships when they passed by, and precious stones and costly wares.[78] In the *Haravilāsam* of S'rīnātha which was dedicated to the merchant prince Tippayya Ceṭṭi of Simhavikramapaṭṭaṇa (Nellore), we have a graphic description of the foreign trade carried on by the Ceṭṭis. According to it, Tippayya Ceṭṭi and his brothers Tirumala Ceṭṭi and S'āmi Ceṭṭi imported valuable articles by both land and sea and supplied them to Harihara of Vijayanagar, Kumāragiri of Koṇḍavīḍu, Feroz Shāh Bāhmani and the Gajapati ruler of Orissa. Among the goods imported by them were camphor plants from the Punjab, gold (plate or dust) from Jalanogi, elephants from Ceylon, fine horses from Hurumanji (Ormuz), musk from Goa, pearls from *āpaga* (sea), musk (*kastūri kaṭārikam*) from Cotangi (Chautang) and fine silks from China.[79] In the later phases of the commercial history of the Vijayanagar Empire also, the Ceṭṭis played an important part. During the period of the establishment of trade settlements by the English in South India, they were very influential. At that time one Mallai or Mallaya *alias* Cinnaiah or Cinana Ceṭṭi, was an influential merchant with whose help the Dutch were carrying on their transactions with Indian traders, weavers, etc. One of his dependants was a *S'*ēṣādri Ceṭṭi of Porto Novo who in course of time rose to the position of the chief Indian merchant at Madras. Mallai was a very important figure in the troubled politics and trade of the Carnatic for nearly half a century.[80]

78. Mahuan, *Account*, JRAS, 1896, p. 344.

79. S. K. Aiyangar, *Sources of Vijayanagar History*, (Madras University) pp. 57-58.

80. See C. S. Srinivachari, *op. cit.*, pp. 30-7.

The Cettis did business in the west coast area also. About them Barbosa says: "The more part of them are great merchants and they deal in precious stones, seed pearls and corals, and other valuable goods, such as gold and silver, either coined or to be coined. This is their principal trade, and they follow it because they can raise or lower the prices of such things many times; they are rich and respected; they lead a clean life, and have spacious houses in their own appointed streets......... They go naked from the waist up, and below gather round them long garments many yards in length, little turbans on their heads and long hair gathered under the turban. Their beards are shaven, and they wear finger marks of ashes mixed with sandalwood and saffron on their breasts, foreheads and shoulders. They have wide holes in their ears, into which an egg would fit, which are filled with gold with many precious stones, they wear many rings on their fingers, they are girt about with girdles of gold and jewellery and ever carry in their breasts great pouches in which they keep scales and weights of their gold and silver coins and precious stones. They are great clerks and accountants, and reckon all their sums on their fingers. They are given to usury, so much so that one brother will not lend to another a *ceitil* without making a profit thereby".[81]

The Cettis settled in the far eastern countries like the Archipelago for purposes of trade. Barbosa mentions that there were in Malacca *Chetige* merchants from the Coromandel "who were very corpulent with big bellies, they go bare above the waist and wear cotton clothes below".[82]

The Malabarees were another important enterprising community that carried on a part of the trade of the country. They supplied the products of their country such as spices, cocoanut products, palm sugar and palm wine to the Canara

81. *Barbosa*, II. pp. 71-73.
82. *Ibid.*, p. 177.

people and took in return coarse rice and iron.[83] During periods of famine in the Coromandel area they brought great store of rice and cocoanuts and took back ship loads of slaves.[84]

Among the Brahmans of the country there were many who were engaged in trade and settled down as merchants.[85] The Baniyas were found doing business in some parts of the west coast.

The merchants of the day were keen businessmen. Barbosa testifies to their ability and says: "The more part of all of the Heathen merchants or Chatis who live throughout India are natives of this country (Coromandel) and are very cunning in every kind of traffic in goods."[86] Referring to their sons, he says that they, even when they were ten years of age, went about changing coins.[87] They were also men of standing.[88] Nuniz observes that they were honest men given to merchandise, very acute and of much talent, very good at accounts.[89]

In the purchase and sale of articles different methods appear to have been followed by the merchants. Among them was the system of buying in advance. Referring to the merchants (*vyābāris*) of the Malabar coast, Barbosa says: "They deal in goods of every kind both in the seaports and inland, wherever their trade is of most profit. They gather to themselves all the pepper and ginger from the ryots and husbandmen and oftentimes they buy the new crops beforehand in exchange for cotton clothes and other goods which they keep at sea-ports. Afterwards they sell them again and gain much money thereby".[90] Some-

83. *Barbosa*, II, pp. 186-97.
84. *Ibid.*, p. 125.
85. Sewell, *op. cit.*, p. 245.
86. *Barbosa*, II, pp. 125-26.
87. *Ibid.*, II, p. 73
88. *Ibid.*, II, p. 73.
89. Sewell, *op. cit.*, p. 390.
90. *Barbosa*, II, p. 56.

times the merchants made advances to the weavers and purchased calicoes, chintz and muslins.[91] The advances were usually made through middlemen, later known as *dubashes* (interpreters who knew the two languages, English and the local language). The middlemen guaranteed the proper and timely supply of cloth, bleached and unbleached, including painted and printed varieties.[92] The articles that came into the country were valued in the following way at Quilon. What obtained there might have been followed in the different parts of the Vijayanagar Empire. In such a procedure the broker had an important place. Mahuan says: "When a ship arrives from China the King's overseer with a Chitti go on board and make an invoice of the goods, and a day is settled for valueing the cargo. On the day appointed the silk goods, particularly the Khinkis (kincobs), are first inspected and valued". When that had been decided on, in the presence of all, the broker announced that the price of the goods had been fixed and could in no way be altered. The price of pearls and precious stones was arranged by the 'weinaki broker' and the value of the Chinese goods taken in exchange for them was the one previously fixed by the broker in the above manner. They had no abacus on which to make their calculations, but in its place they used their toes and fingers, and curiously enough they never went wrong in their calculations.[93]

Varthema gives an interesting description of how sales were effected. He says: " The merchants have this custom when they wish to sell or to purchase their merchandise, that is wholesale. They always sell by the hands of the *Cortor* or of the *Lella*, that is of the broker. And when the purchaser and the seller wish to make an agreement, they all stand in a circle, and the *Cortor* takes a cloth and holds it there openly with one hand, and with the other hand he

91. W. Foster, *The English Factories in India*, Intro., p. xxxviii.
92. C. S. Srinivasachari, *op. cit.*, p. 2.
93. Mahuan, *Account*, JRAS, 1896, pp. 346-47.

takes the right hand of the seller, that is, the two fingers next to the thumb, and then he covers with the said cloth his hand and that of the seller, and touches each other with these two fingers, they count from one ducat up to one hundred thousand secretly, without saying 'I will have so much' or 'so much'. But in merely touching the joints of the fingers they understand the price and say, 'yes' or 'no'. And the *Cortor* answers, 'no' or 'yes'. And when the *Cortor* has understood the will of the seller, he goes to the buyer with the said cloth and takes his hand in the manner above mentioned, and by the said touching he tells him he wants so much. The buyer takes the hand of the *Cortor* and by the said touching says to him: 'I will give him so much'. And in this manner they fix the price".[94]

Section 3

Means of Communication and Transport

Facilities for easy transport, external and internal, give an impetus to trade; while harbours, either natural or artificial, encourage navigation and foreign trade, good and safe roads and navigable rivers encourage the growth of internal trade. The existence of all these facilities was responsible for the flourishing condition of trade in the Vijayanagar Empire.

Ports

As said earlier the Vijayanagar Empire covered practically the whole of South India below the river Kṛṣṇā and extended from coast to coast. But there is a wide contrast between the eastern and western coasts of the peninsula. The former is a barren sandy shore monotonously stretching away till it fades in the heat haze. It is without shade or

94. *Varthema*, pp. 168-69.

refuge, and mile after mile we see only the sandy beach and the breaking waters. The western coast presents a differnt aspect. It affords a very interesting panorama of grand and picturesque scenery. In the coast are high ranges sometimes lifting their peaks above the belts of clouds, sometimes covered by thick forests and at some places allowing their rocky feet to be washed by the waves of the Arabian Sea. Occasionally a patch of fertile region separates the hills from the waters of the sea. "To the ship sailing fast, the shore presents an ever varying outline, generally a dark serried belt of cocoa trees whose roots are washed by the waves, divided at frequent intervals by the gleaming mouths of broad rivers. Rocky head lands, seldom uncrowned with old fort or white pagoda jut out, forming a succession or winding bays.......... A Special feature in the aspect of the country is a flatless uniform, yet infinitely diversified. The description of one suffices for the general features of all, but there is an endless variety of picturesque likeness just as no Devonshire combe repeats another".

According to Ábdur Razzāk there were in both the coasts three hundred ports each of which was equal to Calicut, an important and well-known port even in those days.[95] According to the *Burhan-i-Masir* there were sixty ports in the Vijayanagar Empire.[96] Perhaps these sixty were the more important ones among the ports. It is possible that some might have decayed giving place to new ones in course of time. In the sixteenth century the Vijayanagar kings lost such important ports as Goa, Chaul and Dabhol, though Kṛṣṇadēva Rāya might have added a few ports to his Empire in the north-east by his reconquest of the provinces of Udayagiri and Koṇḍavīḍu.

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95. Elliot, *op. cit.*, IV, p. 103.

96. *Ind Ant.*, L, p. 143. It may be noted here that there are in all about fifty ports in the Madras State at the present day including the major ports of Madras. Vizagapatam, Tuticorin and Cochin.

A few words may be said here about some of the important ports in the Empire. To begin with on the west coast lay the ports of Chaul, Dabhol and Goa. Chaul was such an important place in the period that during parts of the year a great fleet of ships was found there doing business in spices, cocoanuts, drugs, palmsugar, cotton goods, wheat, grains, rice, millet, etc.[97] The place was also important as a great centre for the trade in horses, and the manufacture of silk, muslin and calicoes. Dabhol was another important place where lived Muslims and Hindus. The harbour at the place was good and was visited by ships from Mecca, Aden and Ormuz, carrying many horses. It traded with Cambaya and other places in different articles.[98] Among the articles exported from the place were wheat, grain, chick peas and pulse. But Goa was the most important of the ports in the west coast, and was conquered for Vijayanagar so early as 1391 A. D.[99] About the trade carried on in the port Barbosa says: "In this port of Goa there is a great trade in many kinds of goods, from the whole of Malabar, Chaul, Dabul and the great kingdom of Cambaya, which are consumed on the main lands, and from the kingdom of Ormuz come every year ships laden with horses and great numbers of dealers from the great kingdom of Narsyngua, and from Daquem, come hither to buy them".[100] The merchants from Ormuz took from the place cargoes of rice, sugar, iron, pepper, ginger and other spices of different kinds besides drugs.[101] This important port passed into the hands of the Muslims first and then into those of the Portuguese.

In the Kanara country there were a large number of ports among which may be mentioned Honāvar, Bhatkal,

97. *Barbosa*, I, pp. 159-60.
98. *Ibid.*, I, p 165.
99. *JBBRAS*, iv, p. 107; Sewell, *op. cit.*, p. 45. *fn.* 2.
100. *Barbosa*, I, p. 178.
101. *Ibid.*

Bākanūr, Mangalore, Manjēśvar, Cumbola and Nīlēśvar. Honāvar was governed by a Rāja paying tribute to the Vijayanagar Empire.[102] The place was important for commerce. The Malabarees carried on great trade at the place and took great store of black rice and brought in return cocoanuts, oil, palm sugar and palm wine.[103] Barbosa says that every year a multitude of *zambuquos* both great and small came for that trade, for much rice was consumed in Malabar by reason that it was their chief diet. Bhatkal in the south was another important seaport to which the Ormuz ships brought horses and pearls and returned with white rice, black rice, myrobalan, powdered sugar and cargoes of iron. Much copper was used at the place and taken inland for coinage besides for manufacturing vessels used by the people. Likewise quicksilver, vermillion dye, coral, alum and ivory were also available there.[104] Bacanor was visited by many ships from abroad as well as from Malabar for taking in cargoes of husked rice. Great stores of it were taken to Ormuz, Aden, Cannanore and Calicut and bartered for copper, cocoanuts and molasses.[105] Mangalore was an equally important place from which many ships took cargoes of black rice to sell in the land of Malabar. Rice was also taken to Aden and Ormuz by the Muslims.[106] To Cumbola the Malabarees went to purchase black rice to be sold to the humbler classes of people. Black rice was also sold in the Madlive islands in exchange for cairo (coir).[107] Lower down were the ports of Cannanore, Fandarina, Dharmapatam, Mañjalūr, Jarfattan, Shāliāt, Balimkūt, Tiruvarankād, Tānūr, Ponani, Iḍakād, Kodungallur, Cochin and a few others. But many of them were outside the frontiers of the

102. Heras, *Aravidu Dynasty*, p. 186.
103. *Barbosa*, I, pp. 185-86.
104. *Ibid.*, I, pp. 188-91.
105. *Ibid.*, p. 194.
106. *Ibid.*, pp. 195-96.
107. *Ibid.*, p. 197.

Vijayanagar Empire. Calicut was a rendezvous for ships from China to Eastern Africa and vessels sailed from the place to Makka, for the most part laden with pepper. Nikitin says that it was "a noble emporium for all India, abounding in pepper, lac, ginger, a larger kind of cinnamon, myrobalans and zadoary"[108] Affonso de Albuquerque while referring to Cochin and Calicut says that they were the principal marts for ginger, for the whole of the pepper of Malabar and for the precious stones of Narsinga. (Vijayanagar)[108a]In the south were Quilon and Kāyal, the latter on the southern extremity of the east coast of South India .The former was 'a very great city with a right good haven, where traded Muslims, Hindus and Christians'. According to Barbosa, the Moors and Heathens were great traders and possessed many ships dealing in goods of diverse kinds and in which they sailed in all directions to the Coromandel, Ceylon, Bengal, Malacca, Sumatra and Pegu. But they did not trade with Cambaya. There was a great store of pepper at the place.[109] Kāyal a port nearby was also a very good haven, whither every year sailed many ships from Malabar and other places, the Coromandel and Bengal, so that there was at the port great traffic in goods of many kinds coming from many regions. The Ceṭṭis of Kāyal were men of high standing, dealing in abundance of precious stones and seed pearls. According to Barbosa the right of fishing in these things belonged to the king.[110]

The coromandel also contained some good ports which were busy in those days. During the days of Barbosa, Nāgapaṭṭiṇam was an important one to which many ships sailed from Malabar to take cargoes of rice. Large quantities of goods were brought to the place from Cambaya, such as copper, quicksilver, vermillion, pepper and goods of

108. Major, *India*, p. 20.; *Barbosa*, II, 85.
108a. Danvers, *The Portuguese in India*, I, p. 285.
109. *Barbosa* II, p. 97.
110. *Ibid.*, p. 123.

other kinds.[111] But by the days of Caesar Frederick the place dwindled in importance. About 1612 A. D. the Portuguese formed their settlement at the place. In 1660 it was seized by the Dutch. Among the other ports in the coast were Tirumalairājanpaṭṭiṇam, Tranquebar, Porto Novo, Dēvanāmpaṭṭiṇam and Caturangapaṭṭiṇam. Tranquebar was acquired by the Danish East India Company from the Nāyak ruler of Tanjāvūr. Porto Novo, on the bank of the river Veḷḷār, was another port of importance. Dēvanāmpṭṭiṇam near modern Cuddalore was an important port where trade was carried on in all kinds of cotton cloths, printed and woven, saltpetre and indigo. Among the articles imported into the place were pepper, nutmeg, cloves, sandalwood, *aglenhout*, lead, *speauter*, sulphur, alum, raw-silk from Sumatra and China, silk manufactures, musk, vermillion, quicksilver, and camphor from China and Borneo.[112] At Caturangapaṭṭiṇam (Sadras) the Dutch had a good port. To the north of these was Mylāpore (San Thomē), a sea-port which, during the day of Barbosa, was almost deserted.[113] But with the coming of the Portuguese it became important again. San Thomē rose to prominence as a Portuguese settlement after 1550. According to the Italian traveller Caesar Federick who visited it about 1565 it enjoyed a good volume of trade. Still farther north lay Pulicat, a very important emporium of trade on the east coast. It was resorted to by Muslims doing trade in different goods. Pulicat had trade relations with Pegu, Malacca and Sumatra in the east and Malabar and Cambaya in the west. Besides, many traders came to the place from the interior of the country to purchase goods of many kinds for which they brought from Pegu great store of rubies, spinels and large quantities of musk which could be purchased cheap by one who knew how to buy and choose them.

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111. *Barbosa*, I.I. p. 125.
112. Schorer's Account of the Coromandel Coast, IHQ, xiv, p. 827.
113. *Barbosa*, II, p. 126.

Printed cotton cloths were available there in large quantities which were highly valued in foreign countries. There was also available at the place copper, quicksilver and vermillion besides other Cambaya wares, dyes in grain (Mecca velvet) and rose water.[114]

Mōṭupaḷḷi was the last important port on the east coast of the Vijayanagar Empire.[115]

Shipping

The extensive trade of South India with the trans-oceanic people both in the east and the west presupposes the existence of many ships in the country and a good knowledge of shipping by the people. An epigraph of 1413 A. D. contains such terms as ship, cabin and high mast.[116] According to the Venetian traveller Nicolo dei Conti, the Indian ships were larger than those of his country and capable of containing two thousand butts and five sails and as many mats. Their lower part was constructed with triple planks in order to withstand the force of tempests. But some ships were built in compartments so that if one part "should be shattered, the other portion remaining entire may accomplish the voyage".[117] Varthema observes that at Calicut were made vessels each of three hundred or four hundred butts.[118] Barbosa says that the Moors in the days of their prosperity in trade and navigation "built keeled ships of a thousand two hundred *bahares* burden. These ships were built without any nails, but the whole of the sheathing was sewn with thread, and all upper works differed much from the fashion of others, they had no decks".[119] It is interesting to note that nail was not largely used in the construction of the ships. But the

114. *Barbosa*, II, pp. 130--32.
115. V. R., I. M. P., ii, On. IIIa.
116. E. C., ii, No. 258.
117. Major, *India*, p. 27.
118. *Varthema*, p. 154.
119. *Barbosa*, II, p. 76.

pieces of wood were sewn together by coir made from the husks of the cocoanut. Sails were made of mats. Compared to the Chinese ships, the Indian ones appear to have been poorly provided with masts, oars, rudder, etc. They had generally only one mast and one sail. Their anchor was small and either of marble or hard wood.[120] Ships were also built for South India in the Maldive islands, where they were made of palm trunks, sewn together with threads, for they had no timber. They also built smaller boats for rowing, like *brigantins* or *fustas.* They were very graceful, well-built and extremely light.[121] In Goa "fair galleys and *brigantins* were built after the Portuguese fashion and style.'"[122] The important places where ships were built were in the west coast and the Maldive islands.

River transport was an important problem in the Vijayanagar days and it was done by means of ferries and basket boats. To facilitate easy ferrying, good fords were provided at important riverside places to cross rivers.[123] The people were then familiar with the *harigolu* or coracle or round basket boat covered with hides.[124] Paes gives an interesting description as to how the basket boats were rowed. He says: "A captain lives in this city (Anegundi) for the king. People cross to this place by boats which are round like baskets; inside, they are made of cane and outside, are covered with leather; they are able to carry fifteen or twenty persons and even horses and oxen can cross in them if necessary; but for the most part these animals swim across. Men row them with a sort of paddle, and the boats are always turning round as they cannot go straight like others; in all the kingdom where there are streams

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120. Vascoda Gama, *The Three Voyages*, p. 241.
121. *Barbosa*, II, pp. 107-108.
122. *Ibid.*, I, p. 177.
123. M. A. R., 1920, p. 36.
124. E, C., vii, Sh. 3,

there are no other boats but these".[125] Nuniz also refers to the use of basket boats in the rivers.[126] In the Tamil districts, boats called *parisus* made of wicker and leather were used. In the coromandel coast was in use a type of boat known as the *masala* which is in use even now and is admirably contrived to resist the impetus of the surf. It is built of planks of wood sewed together with jute twine and caulked with course grass, not a particle of iron being used in the entire construction. Both ends of the boat are sharp and narrow and tapering to a point so as easily to penetrate the surf. Besides, rafts (floating logs or bundles of brushwood of reeds or rushes tied together) dug-outs or hollowed trees, canoes or boats of pieces of wood fastened together with fibres of vegetable growth also appear to have been used. Another kind of small boat was made out of the body of a tree and could hold only two people. Men who rowed the boats sat one at each end with a pair of little oars and rowed extremely fast even against the currents. Barbosa testifies to the provision of good river communications in the Empire.[127]

The fisherfolk largely used the *catamarans* to sweep the rivers and the seas. They were several thick pieces of wood fastened together in the form of rafts.[128]

Trade with important places in the West was carried generally by the Red Sea route, though the narrow sea was difficult of navigation on account of the extreme fog in the area and the existence of small rocks and islands in it. This prevented travel by night in the region.[129] Another route was through the Persian Gulf. To the East there appear to have been two routes, one by sea and the other by land, the latter by way of Bengal. The ships in order to avoid tempests in the seas did travelling in summer. The merchants

125. Sewell, *op. cit.*, p. 259.
126. *Ibid.*, p. p. 292 and 293.
127. *Barbosa*, I. p. 165
128. Lockman, *The Travels of the Jesuits*, I, p. 358.
129. *Varthema*, p, 54; Major, *India*, p. 21.

started in February and returned between August and October of the same year.[130] The mariners used charts for navigation purposes.[130a] Navigation seems to have been extremely slow, the average distance traversed by a ship in a day being not more than forty miles. For instance it took eighteen days to travel from Mascat to Calicut[130b], fifteen days to travel from Cambay to Calicut and another fifteen days to travel from Calicut to Ceylon.[130c] Besides there was good deal of coastal traffic, and articles were carried from Bengal to Cochin and Calicut along the important ports on the east coast of India. Likewise there was good coastal trade between the ports in the west coast.

Piracy

Though a large volume of trade was carried on with foreign countries it was done only at great risk for the seas were infested with pirates especially on the west coast who very often attacked the merchants carrying cargoes and robbed them of their wares. During winter they lived by fishery; but during summer they lived by robbery of all they could find on the sea. They made use of small rowing vessels with a *bargatin*. Barbosa says that they were great oarsmen and a multitude of them gathered tgoether, all armed with bows and arrows in plenty and thus they surrounded any vessel, they found becalmed, with flights of arrows until they took it and robbed it.[131]

It is curious that piracy on the seas was to some extent encouraged by the rulers of the day, though they did so with a purpose. Thus Honāvar was the headquarters of two pirates, Timoja and Raogy, both brothers, who paid a part of their plunder to the ruler of Garsopa who was then ruling that part of the country.[132] Timoja was practically

130. *Barbosa*, II, pp. 63 and 77.
130a. Purchas, *His Pilgrims* I, pp. 110ff.
130b. Elliot, *op. cit.*, IV pp. 97-8.
130c. Major, *India*. p. 19.
131. *Barbosa*, II, p. 96 : see also I, p. 153.
132. Vasco da Gama, *The Three Voyages*, p. 309.

and in effect the commandant of the Vijayanagar fleet.[133] According to Barbosa each of them maintained five or six large ships with crews of well-armed men in great numbers. They went forth to the sea, took all the ships they met except those of Malabar and robbed them of whatever they carried, leaving the men alive. Then they shared the stolen goods with the lord of the land for his favour.[134] These pirate chieftains were commissioned to attack the Muslim trade ships and hence they did not molest the ships of the Malabarees (Hindus). This policy of encouraging piracy was followed by the Hindu Government to molest the trade of the Bahmani kingdom. Likewise, a little south the area round Quilon was infested by pirates.[135] Nikitin also complains that the sea was infested with pirates.[136]

Besides, the coastal area was subject to the piratical activities of the Portuguese, who, not content with the profits of their business, took to these nautical operations. We have a description of their practices in the following words: "Besides these cruelties perpetrated on the land, the Portuguese were also responsible for unmentionable atrocities on the sea. The Feringi ships alone did not keep the peace. The Muhammadan ships were the special objects of their fury. Every ship had to carry safe-conduct issued by the Portuguese captain. But even with that they were not safe. The Portuguese seamen demanded heavy bribes and *bakshish*, and if whatever they asked for was not given, the ships would be confiscated."[137]

It is refreshing to note that the east coast did not suffer from the dangers of organised piracy in the Vijayanagar days, though we hear of stray cases of piratical

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133. Heras, *Aravidu Dynasty*, I, p. 57.
134. *Barbosa*, I, pp. 186-37.
135. *Ibid.*, II, pp. 95-96.
136. Major, *India*, p. 11.
137. Panikkar, *Malabar and the Portuguese*, p. 94. For a description of the Portuguese piratical practices see also Shakh Zaynu'd-Din's *Tahfat-al-Mujāhidīn*, *Annals of the Oriental Research Institute*, *Madras University*, vi, No. 1.

attacks. It appears that trade in the east coast was more safe in those days.

Inland Trade

Though there was such an extensive volume of foreign trade carried in South India during the Vijayanagar days, the people were largely a land people doing a good lot of internal trade. Hence the problem of transport within the Empire was even more important than oceanic transport; and considering the standards of the age, the Vijayanagar sovereigns solved the question in the best possible way and tried to contribute to the maintenance of an active commercial life in the Empire.

The different parts of the vast Empire were connected by roads to which we get occasional reference in literature. As the capital of the Empire, the city of Vijayanagar was connected with the different important cities in the Empire. One road connected the capital with Goa through Bankāpūr, an important fortress in the Karṇāṭaka country situated forty miles south of Dharwar on the direct road from Honāvar to Vijayanagar. Another road seems to have run from Bhatkal on the west coast to Vijayanagar through Honāvar, Bankāpūr, Banavāsi and Rāṇi Bennūr.[138] A road appears to have connected Vijayanagar and Mylapore running through Candragiri, Tirupati and Pulicat.[139] Barbosa refers to a trade route connecting Vijayanagar and Pulicat.[140] There appear to have been two roads in the north, one going from Masulipatam to Kōvilkoṇḍa and another from Kōvilkoṇḍa to Kampili.[141]. In the south a road connected Kāyamkuḷam and Tirunelvēli through the kingdom

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138. See Sewell, *op. cit.*, p 122; and *fn.*
139. Major, *India*, p. 7.
140. *Barbosa*, II, p. 130.
141. JBBRAS, xxii, p. 28.

of Quilon.[142] Besides, the routes which Kṛṣṇadēva Rāya followed in his military campaigns and religious tours indicate the existence of the following roads:–

1. Vijayanagar to S'ivasamudram and S'rirangapaṭṭaṇam.[143]
2. Vijayanagar to Ādavāni and Raicūr.[144]
3. Vijayanagar to Udayagiri, Koṇḍavīḍu, Koṇḍapalli and along the coast to Simhācalam and S'rikūrmam[145]
4. Vijayanagar to Kāḷahasti, Tirupati, Kāñci, Tiruvaṇṇāmalai, Cidambaram, Madhurai, Rām-ēs'varam and Dhanuṣkōḍi.[146]

The roads appear to have been good ones. Paes says that on the road from Bhatkal to a town called Zambuja there were some ranges with forests and that nevertheless the road was very even.[147] Pietro Della Valle who visited the Empire a century later remarks: "The way between Ikkēri and Sāgar is very handsome, plain, broad, almost totally direct, here and there beset with great thick trees which make a shadow and a delightful verdure".[148] We have no definite idea as to the width of the roads but the fact that there was difference in the breadth of the roads is indicated by such terms used in incriptions as *peruvaḷi, vaḷi and teru.* [148a] Though there is thus evidence to show that there were roads connecting the different parts of the Empire, we are not sure if the total mileage of roads could have been as much as we have at the present day. Besides it is doubtful if at least the more important of them were metalled and provided with good drainage, culverts and

142. Panikkar, *Malabar and the Portuguese*, p. 96. For a reference to some other roads see N. Venkataramanayya, *Studies in the History of the Third Vijayanagarā Dynasty*, pp. 296-97.

143. S. K. Aiyangar, *Sources of Vijayanagar History*, pp. 112 and 113.

144. Sewell, *op. cit.*, p. 307.

145. *Ibid.*, pp. 316-19.

146. S. K. Aiyangar, *op. cit.*, p. 116

147. Sewell, *op. cit.*, pp. 236-37.

148. Della Valle, *op. cit.*, II, p. 266.

148a 422 of 1912; 180 of 1938-4; 358 and 368 of 1923.

bridges. The wide prevalence of the ferry system in the rivers points to the fact that there were no good bridges over them.[148b]

Articles were carried over long distances by carts and pack animals.[149] But it appears that carts were not used on a large scale in some parts of the Empire probably owing to the bad condition of the roads. But articles were usually conveyed by *kāvadis*,[150] head-loads, pack-horses, pack-bullocks, pack-ponies and asses. Barbosa observes that goods were carried by means of buffaloes, oxen, asses and ponies and refers to the consignment of pepper from Malabar on oxen and asses.[151] Oxen and sumpter-mules as beasts of burden are referred to by Paes and Nuniz also. The former says that to Bhatkal came every year five or six thousand pack-oxen.[152] Caesar Frederick also observes that the people rode on bullocks with panels, girts and bridles and that they had a very commodious pace.[153] Barbosa gives the interesting information that usually there was one conductor or driver in charge of twenty or thirty oxen.[154] The use of horses is referred to in the *Āmuktamālyada*.[155]

Canals were used for transportation of produce. Barbosa mentions for instance that from the inland regions great store of cloth came down the river.[155a] For that, *parisalus* were largely used. After the cargo had been disposed of, the boats were broken up and sold away for what

148b. It may be of interest to note here the total mileage of roads in the Madras State at the present day. There are 32.35 miles or so of roads for every 100 square miles of area, while in Britain there are 2.4 miles of roads, in Germany 1.2 and in France 1.9 per square mile. There are still thousands of villages with population of a thousand and over that are not connected with the main roads.

149. *Varthema*, pp. 179-80; Sewell *op. cit.*, p. 254.

150. E. C., iv, Nj. 266; E. I., vi, pp. 230-39; 18 of 1915; *Rep.*, para 48.

151. *Barbosa.*, (Stanley), pp. 85 and 86.

152. Sewell, *op. cit.*, pp. 237, 238 and 366.

153. Purchas, *His Pilgrims*, x, p. 98.

154. *Barbosa*, I, p. 163.

155. Canto, II, v. 96.

155a. *Barbosa*, I, p. 165.

the bamboo would fetch, while the leather was doubled up and carried by the owners to be again used in a similar manner.

The articles of internal trade were usually sold at weekly fairs or those held at periodical intervals or in the regular bazaars. Regarding the first a few words may be said here. Fairs (*sante*) were usually established by the ruler or the local chieftain in order to encourage trade in the country, for as the demand for goods by the consumers increased, particular localities were not able to supply all of them. Besides it was also a source of income to the Government, for a small duty was collected on the articles sold in the bazaar. The fairs attracted traders from great distances and were an instrument of periodic trade. Usually fairs were held once a week or twice a week. But in a big city like Vijayanagar a fair was held every day in a part of the city.[155b] The articles of trade that entered a fair were horses, bullocks, grains besides many others of a similar nature. In order to attract merchants to bring their articles of trade to such fairs, concessions were at times shown to them.[155c] The bazaars appear to have done retail trading as well. The trading centres were generally the important towns to which were taken the raw and finished articles that were produced in the neighbourhood. The articles however that were carried a long way for being sold, were either of small bulk and high price or those that had been localised in a few places perhaps on account of physical reasons.

Section 4

The State and Commerce

The role of the State in the expansion of commerce and the guarantee of security in the empire for the fostering of an active commercial life in the country can

155b. Sewell, *op. cit.*, pp. 255, 256.

155c. E. C., x, Sg. 112; Bp. 72.

hardly be exaggerated. An irresponsible economic policy would stifle commerce and kill industries. Want of security in the empire may paralyse all trade and shatter the economic well-being of the society. A study of the economic policy of the Vijayanagar sovereigns shows that they were anxious to raise the standards of the socio-economic well-being in the Empire.

The rulers considered it their duty to encourage the foreign commerce of the country. Kṛṣṇadēva Rāya lays down in his *Āmuktamālyada* the maxim to be followed by the kings in this respect. He says: "A king should improve the harbours of his country and so encourage its commerce that horses, elephants, precious gems, sandalwood, pearls and other articles are freely imported into his country. He should arrange that the foreign sailors who land in his country on account of storms, illness and exhaustion are looked after in a manner suitable to their nationalities.[156] In another place he observes : "Make the merchants of distant foreign countries who import elephants and good horses be attached to yourself by providing them with daily audience, presents and allowing decent profits. Then those articles will never go to your enemies".[157] That these maxims were followed in the Empire is borne out by the evidence of Barbosa, who, referring to Vijayanagar, observes: "There is great traffic and an endless number of merchants and wealthy men, as well among the natives of the city who abide therein as amongst those who come thither from outside, to whom the king allows such freedom that every man may come and go and live according to his own creed, without enquiry whether he is a Christian, Jew, Moor or Heathen. Great equity and justice is observed to all, not only by the rulers but by the people one to another."[158] Likewise the State sought to assure security to the merchants who brought their goods from distant countries. In

156. *Canto*, IV, v. 245.
157. *Ibid.*, IV, v. 258.
158. *Barbosa*, I, p. 202,

Calicut for instance there was such great security prevailing that Ábdur Razzāk noted with pleasure that rich merchants brought to that place from maritime countries large merchandise, which they disembarked and deposited in the streets and market-places, and for a length of time left it without consigning it to any one's charge or placing it under a guard. The officers of the custom house had it under their protection and kept guard over it night and day.[159] A word about the safety of the ships which on account of weather or some other reason reached a place to which it was not bound. It was the practice in other countries to plunder such ships. But in India the treatment given to them was different. According to Ábdur Razzāk whatever place a ship may come from or wherever it may be bound, when it reached the port, it was treated like other vessels and had no trouble of any kind to put up with.[160]

Articles of foreign trade like horses, elephants and precious stones were in great demand at the royal courts and that gave much encouragement to foreign traders. This is well indicated by the remark of Nuniz that Sāḷuva Narasimha took horses dead or alive at three for a thousand *pardaos*, and of those that died at sea they brought him the tail only and he paid for it just as if it had been alive.[161]

The tariff policy of a government generally affects the trade of the country. To use a modern expression the policy of the government was the encouragement of free trade in preference to a policy of protection. The available evidence indicates that the articles from foreign countries were subjected to a customs duty at the place of imports. According to Ábdur Razzāk a duty was collected

159. Elliot, *op. cit.*, IV; p. 98.
160. Major, *India*, p. 14.
161. Sewell, *op. cit.*, p. 307.

at Calicut at the rate of two and a half per cent.[162] But it appears the rate gradually rose to five per cent towards the close of the fifteenth century. It is refreshing to note that the Persian ambassador says that the duty was levied only when the sale was effected. If the goods were not sold no charge was made on them. Caesar Frederick says that the horses that went into the country from Goa paid a custom "two and forty pagodie" each.[163] On the east coast at S'adiravāsagaṉ Paṭṭiṇam (modern Sadras) for instance, was levied a duty on certain articles of merchandise; ten percent was collected on the sale of cloth, fifteen per cent on the sale of oil and two-fifths of a *paṇam* on every bundle of female cloth.[164] This wise policy of the levy of a tax on the articles sold, and not on the articles come for sale, must have very much encouraged the sale of merchandise, more specially the foreign ones.

The flourishing condition of internal trade in a country depends on the security and safety in the empire. The foregin travellers who visited the Vijayanagar Empire were very much impressed with the sense of security prevailing in it. Varthema who bears testimony to such a state of affairs says that in Vijayanagar one could go anywhere in safety.[165] Reference has been made to the remark of Barbosa that great equity and justice was observed to all not only by the rulers but by the people, one to another.[166]

The security of the people was sought to be assured by the Government by the organisation of a police system and the imposition of severe punishment for offences. The police force in the Empire was of two kinds, one maintained by the State and the other maintained by the people. The government policemen were made responsible for the main-

162. Elliot, *op., cit.*, p. 98.
163. Purchas, *His Pilgrims*, X, p. 92.
164. 173 of 1933; *Rep.*, para 37.
165. *Varthema*, pp. 130-31.
166. *Barbosa*, I, p. 202.

tenance of peace and the detection of crimes within their jurisdiction. Their business was to acquaint themselves with all the events and accidents within the city and to recover the lost things; but if they failed to do so they were fined.[167] Nuniz says that if any one complained to the king that he was robbed in such and such a province and on such and such a road, the king sent immediately for the captain of that province though he was at court and the captain was seized and his property taken if he did not catch the thief. The police of the city were under the control of the Prefect of the place.[168]

The provincial *Nāyakas* who were made responsible for the maintenance of order within their jurisdiction attended to their police duties by appointing *kāvalgārs* under them. The appointment of these men for *kāval* work was very helpful in preventing theft by their caste-men and restoring the property stolen within their locality. The *kāvalgārs* appointed *talaiyāris* under them in each village under their jurisdiction. The *talayāri* was the guardian of the village peace. He was held responsible for the thefts in the village; if he was not able to catch the thief and restore the stolen property he was required to make good the loss himself.[169] These local policemen were liable to be punished if they did not discharge their duties properly. In the middle of the fourteenth century for instance the *agam-baḍaiyas* (servants) who were doing police work at Tiruvoṛṛiyūr neglected their duties as a result of which the village suffered much from theft and disturbances, and sustained much loss. They had therefore to be punished.[170]

Those that were on police duty were given additional grants of land since they had to make good the loss of any property within the limits of the village boundary. It is

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167. Elliot, *op cit.*, iv, p. 112.
168. Sewell, *op. cit.*, pp. 380-81.
169. 9 of 1912-13.
170. 240 of 1912.

also interesting to observe that the necessity for their making good the loss was limited to the extent of their means to do so; for the remainder was levied on the village as a whole.[171]

But even such fairly good arrangements with regard to the police organisation in the Empire did not completely free the roads from the robbers, on account of which there was some insecurity in the Empire. Hence the merchants who travelled on roads with the merchandise had to make arrangements with the *kāvalgārs* that they would pay a particular share of their earnings if they were protected from the robbers. We get reference to the existence of organised free-booters during the period.[172] Even the Portuguese merchants seem to have indulged in some robbery in the south.[173] It is for these reasons that the merchants usually travelled on the roads in company. They even paid money to private persons to protect them from robbers in the dangerous zones on the roads. Thus in spite of the protection afforded by the State the merchants sometimes appear to have carried on their trade under adverse circumstances.

Then again, local dues were levied on articles of trade. Rice refers to a kind of tax called the *māryādāyam*[174] by which is meant a duty on articles in transit, collected from the merchants carrying them for sale. According to Nuniz a particular gate at the capital was rented out for twelve thousand *pardaos* and every one carrying merchandise into the city had to pay duty. Nuniz says that every day entered through the gates of the city two thousand oxen every one of which paid three *vintees* except certain polled oxen without horns which never paid anything in any part

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171. Cp. 9 and 14 of 1913; *Rep.*, para 11.
172. JBBRAS, xxii, p. 26.
173. Panikkar, *Malabar and the Portuguese*, p. 96.
174. *Mysore Gazetteer*, Vol. i, p. 583.

of the realm.[175] The levy of such tolls on articles of trade must have made it necessary for the merchants to raise the prices of articles.

Considering various factors it appears that the merchants must have laboured under some disadvantages, at least those engaged in internal trade in the Empire. It seems that the kings in their anxiety to procure for themselves the articles of foreign merchandise and to prevent them from going to the Muslim court in the north gave the dealers in foreign goods, special privileges and facilities to trade in their Empire freely besides consuming a large part of the imports.

The foregoing account of the commercial life in the Empire is largely based on the accounts of foreign travellers who visited Vijayanagar during the different periods of its history. Neither the indigenous literature nor the numerous epigraphs do help us very much in making a good picture of the commercial activities in the Empire. The epigraphs which are of any help to us simply refer to some articles of trade that were taken to the market and the duties levied on them, but do not mention the other aspects of trade in the Empire. So our knowledge of the subject is perhaps one-sided.

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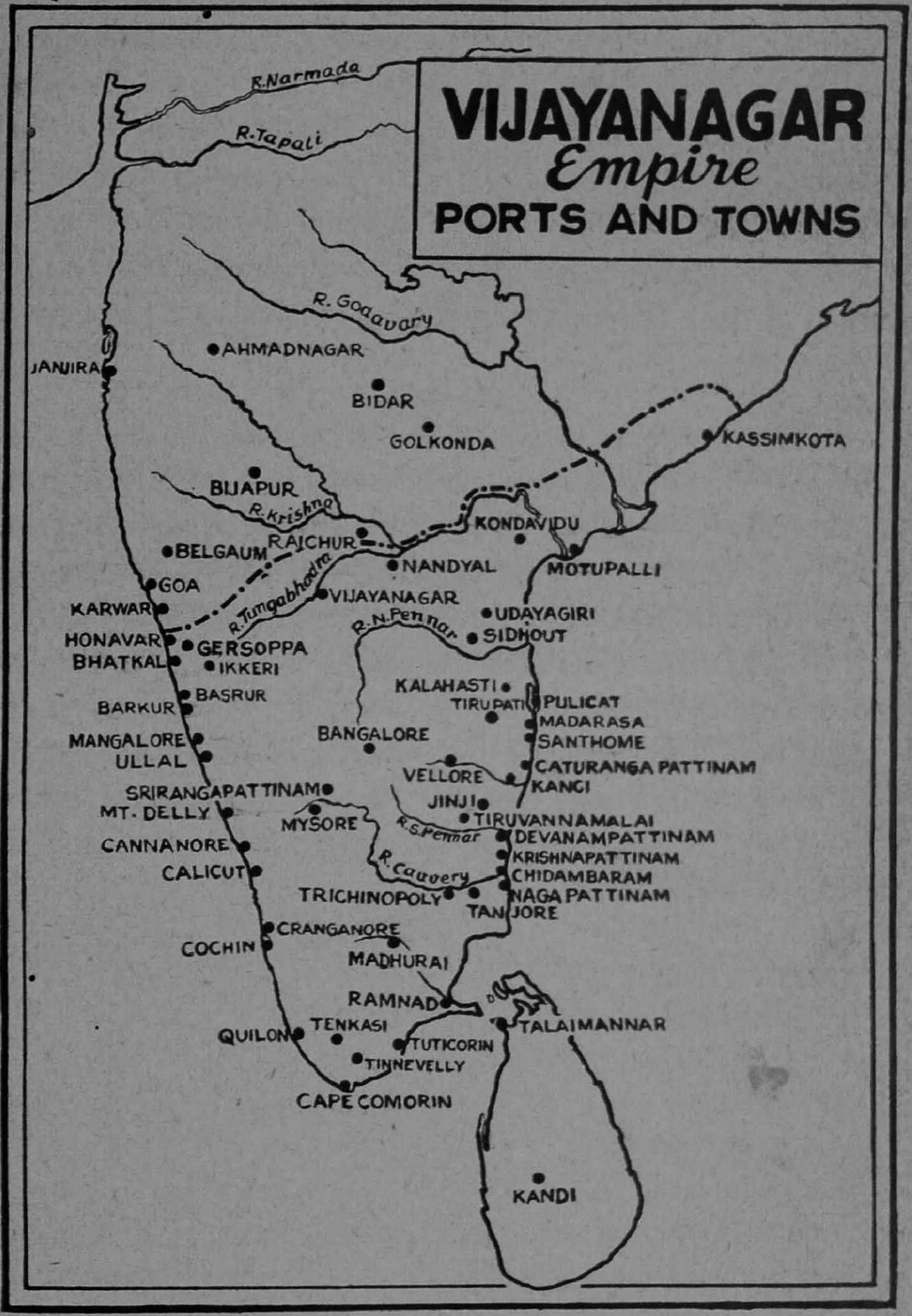
175. Sewell, *op. cit.*, p. 366.


VIJAYANAGAR
Empire
PORTS AND TOWNS
R. Narmada
R. Tapati
R. Godaavary
R. Krishna
R. Tungabhadra
R. N. Pennar
R. S. Pennar
R. Cauvery
JANJIRA
AHMADNAGAR
BIDAR
GOLKONDA
KASSIMKOTA
BIJAPUR
KONDAVIDU
RAICHUR
BELGAUM
NANDYAL
MOTUPALLI
GOA
VIJAYANAGAR
KARWAR
UDAYAGIRI
HONAVAR
GERSOPPA
SIDHOUT
BHATKAL
IKKERI
KALAHASTI
BASRUR
TIRUPATI
PULICAT
BARKUR
MADARASA
MANGALORE
BANGALORE
SANTHOME
ULLAL
CATURANGA PATTINAM
VELLORE
KANCI
SRIRANGAPATTINAM
JINJI
MT. DELLY
MYSORE
TIRUVANNAMALAI
DEVANAMPATTINAM
CANNANORE
KRISHNAPATTINAM
CALICUT
CHIDAMBARAM
TRICHINOPOLY
NAGA PATTINAM
TANJORE
CRANGANORE
COCHIN
MADHURAI
RAMNAD
TALAIMANNAR
QUILON
TENKASI
TUTICORIN
TINNEVELLY
CAPE COMORIN
KANDI

CHAPTER V

TAXATION, CURRENCY AND MEASURES

Section 1

Taxation

All governments depend on finance, and hence great attention is paid to it. Though to some extent governed by custom, the revenue administration in the Vijayanagar Empire was based on some well defined principles.[1] The sources of revenue in it may be classified under the following important heads:

1. Land tax
2. Property tax
3. Commercial tax
4. Profession tax
5. Industries tax
6. Social and communal taxes
7. Military contributions
8. Judicial fines and similar income and
9. Miscellaneous sources of revenue.

1. *Land tax*

A good share of the revenues of the government was contributed by land tax. In the levy of the tax on land certain factors were taken into account by the government, such as the fertility of the soil, the nature of the tenure under which land was held, the kind of crop that was raised on it, and the irrigation facilities enjoyed by the land. An important fact that deserves mention here is that the taxes payable to the government depended on the yield of land. Different methods appear to have been followed

1. The revenue administration in the Vijayanagar Empire has been comprehensively dealt with by the author in his book, *Administration and Social Life under Vijayanagar* (published by the University of Madras), pp. 40-101.

in making assessment on land. An important basis of assessment on wet land was the sowing capacity of the particular unit, while the assessment on dry land was usually calculated in terms of the number of ploughs required for cultivating a particular unit, though, on that account, it was not unusual to make assessment on it in the same way as assessments were made on wet land.

Lands were surveyed completely by Kṛṣṇadēva Rāya for fixing the rates of assessment. A record of 1513 A.D. mentions that some lands were granted "according to former measurement" which indicates that there were two measurements, one old and the other new. According to Rice in the time of Kṛṣṇadēva Rāya and Acyuta Rāya "the revenues of the Vijayanagar State were first reduced to a regular form checked by ordinances, and a system of accounts and management introduced, calculated to improve the revenue of the Empire gradually in yearly amount without distressing the inhabitants."[2]

Regarding the measurement of land there were local variations and the inscriptions of the period mention different measuring rods as having been used in the different parts of the Empire. The differences in the measuring rods caused such inconvenience to the authorities that on a few occasions they tried to make changes in them.[3]

Opinion is divided among scholars as to the exact share of the State from the produce of land. Contemporary evidence does not throw much useful light on this question. Wilks says that Vidyāraṇya (Mādhavācārya) published a manual based on the text of Parās'ara in which the rates of assesment on lands are dealt with. Briefly he took the S'āstra rate of one-sixth of the crops as the government share, and assuming that the average out-turn was twelve times the seed sown, he distributed thirty *kuṭṭis* of paddy from two and a half *kuṭṭis* of land as follows:

2. *Mys. Gaz.*, I, p. 578.
3. 97 of 1917.

To the lord 1/4	...	7½
To the cultivator 1/2	...	15
To the Sarkar 1/6	...	5
To temples 1/30	...	1
To Brahmans 1/20	...	1½
Total	...	30 *kuṭṭis*

The shares of the temples and the Brahmans were taken by the Sarkar and paid over to them so that the share payable by the landholder was really 1/4 of the gross produce. Wilks says that in view of the difficulties experienced in adhering to these recommendations, Harihara converted the payment in kind into payment in cash "founded on the quantity of land, the requisite seed, the average increase and the value of grain".[4]

Burnell feels that the share of the State in the produce from land was one half while Hayavadana Rao thinks that the rate of taxation under Vijayanagar was between forty two and fifty percent. Ellis however observes that the tax was always more than the sixth or fourth permitted by the Sanskrit lawyers. Rice estimates the total income of the State at 81 crores of *avakōṭi cakras or pagodas*.[5] Nuniz says that the feudal vassals of the Vijayanagar sovereigns paid every year sixty lakhs of *pardaos* as royal dues which was half of the gross income from the lands under them.[6] The *Burhan-i-ma'sir* estimates the revenue of the 'accursed infidel' Sadāśiva Rāya at twelve crores of *huns*. The epigraphs of the period do not however help us very much in determining the rates of assessment obtaining then. Though some of them mention the amount of revenue collected from land many of them merely refer to the taxes collected both in kind and in cash. Furthe there appear to

4. *Historical Sketches of Mysore*, I, p. 95.
5. See *Administration and Social Life under Vijayanagar* by the author pp. 49-50.
6. Sewell, *op. cit.*, p. 373.

have been differences in the rates of taxes collected from different places. However the following details may be set down.

According to an inscription of 1429–30 A. D, the residents of Parāntakanāḍu arrived at a decision as to the various items of taxes that they would pay to government (*rājagaram iṟaimuṟaimai*). Some specified lands in the district were set apart as lands that could not be interfered with by classifying them as *paṇḍāravāḍai* (lands belonging to the State, crown lands), *jīvitapaṟṟu*, *aḍaippū* (lands held in lease), *guttagai* (contract of lease), and *s'ērvai* (service *ināṁ*). The rates of assessment fixed were as follows :—

Class of land	Assessment in paddy on one *vēli* including *aras'upēṟu*, *ilakkai* etc.	Other taxes such as *kāṇikkai*, *s'ammādam*, *paṭṭavaṭṭam*, *kāṇikkūli*, etc. on each *vēli*
	(A)	
1. Paddy fields	50 *kalams* of paddy and ¼ *paṇam*.	20 *paṇams*
2. Uncultivated waste (just brought under cultivation).	40 *kalams* of paddy	18 ,,
3. Forest reclaimed	20 ,,	2 ,,
4. *Kaḍaippū* lands and lands irrigated by baling water	20 ,,	10 ,,
	(B)	
5. Plantain and sugarcane gardens in wet land	...	60 *paṇams* including *aras'upēṟu*
6. Plantain and sugarcane gardens in *paḍugaittākku* (embankments).	...	50 *paṇams*
7. Marshes producing red lotuses	...	40 ,,
8. Lands producing turmeric, ginger, onions, garlic etc.	...	25 ,,
9. Lands producing brinjals *vaḷudilai*	...	30 ,,

Class of land	Assessment in paddy on one *veli*, including *arasupēru*, *ilakkai* etc.	other taxes such as *kāṇikkai*, *s'ammādam*, *paṭṭavaṭṭam*, *kāṇkkūli*, etc. on each *veli*
10. Lands producing *nelluparutti*, castor seeds, *varaguparutti*, mustard, Bengal gram and *kus'umbai* (carthamus tinctorious), *ērivāy*, *tāngalvāy* and *pūḷudi* (lands producing paddy and *s'āmbalādi*.	...	20 *paṇams* (including *aras'upēru*, *nīrōlai*, etc.
11. Lands producing gram, green pulse, *taṉiparutti*, *taṉi āmaṇakku*, *tiṉai*, *taṉivaragu*, *s'āmai*, etc.	...	1 *paṇam*
12. Lands producing sesamum (taxed for first crop).	...	¾ ,,
13. Lands yielding *vēdikoḷundu*.	...	200 ,,
14. Lands yielding *olimudukoḷundu* (taxed for first crop).	...	100 ,,

(C)

Dry crops (*Vaṉpayiru*)

1. Every five areca palm yielding about 1,500 nuts per tree.	...	1 ,, (including *aras'upēru*.
2. Every cocoanut palm yielding not less than 40 fruits	...	½ ,,

N. B.—Tender trees which have not borne fruit, barren trees and trees in the backyards of houses are exempted;

3. Every jack tree yielding not less than 20 fruits per tree.	...	lost[7]

N. B:—The surrounding (i. e, other) trees are not taxed.

7. MER, 1915, *Rep.*, para 44.

An inscription mentions that the rate of taxes was as follows:—[8]

1/3 of the produce for *kuṟuvai* during winter

1/4 for sesamum (*eḷḷu*) and ragi (*kēḻvaragu*).

1/6 for millet (*varagu*), *s'āmai*, *kambu*, and other crops cultivated in dry lands

1/4 for sesamum, horse-gram, *payaṟu*, etc.

In 1504–05 A. D. a fresh assessment was made in parts of the the modern South Arcot district according to which lands were to be measured year after year with the standard rod of thirty-four feet and that fifteen *paṇams* (including all items of taxation) were to be levied on one *mā* of dry land and twenty *paṇams* on one *mā* of wet land and that towards *aras'upēṟu* one-eighth was to be levied on each tenant.[9]

Taxes on wet lands were paid usually both in kind and cash and were respectively known as *nellāyam* and *kās'āyam* or *nelmudal* and *poṉmudal*. But taxes on dry lands appear to have been invariably paid in cash.

2. *Property tax*

All property, both movable and immovable, was taxed. Property included houses, house-sites, treasure troves, cows, bulls, sheep, etc. It is interesting to note that unoccupied houses were exempt from taxation. The main difference however between taxation on property in ancient and mediaeval India and in modern India is that while in the modern period the annual income or the rental value of the property is taken into account for purposes of taxation, in the earlier periods the property was taken as a unit for purposes of taxation, irrespective of the income from it. As in the case of the tax on land, there appear to

8. I. P. S., 819.
247 of 1916.

have been local variations with regard to the tax on property. The following details may be set down here:—

Storied house	... ...	2 *paṇams*	
House with inside verandah (Little Kāñcipuram, Chingleput district)	... ...	1 *paṇam*[10]	
House of a village (*naṭṭār*), (including *vilai, āsamdi, vāsalpaṇam*, etc.	... ...	3	[11]
House of *Tantrimār*	... ...	1½ ,,	[11]
House of *makkaḷ*	... ...	1½ ,,	[11]
Verandahs with sloping roofs (Tiruvaigāvūr, Tanjore dist).		¾ ,,	[11]
House of a Vais'ya (Bangalore)	...	1 ,,	[12]
Each *koṭṭil* of the *veṭṭis* (Vṛddhācalam, South Arcot).	...	⅛ ,,	[13]
Each *vāsal* (Tirukkōyilūr)	...	1 ,,	[14]
Outhouse (Yēlandūr)	... ...	1 *gadyāṇa*[15]	
House site (S'ērkāḍ)	... ...	1 *paṇam*[16]	
Cow (C. nagar, Mysore)	... ...	½ *gadyāṇa*[17]	

3. *Commercial taxes*

A large share of the State revenue was contributed by the duties on trade and commercial transactions. According to Rice customs may be divided under three different heads, *sthalādāyam*, *mārgādāyam* and *māmūlādāyam*. Under the first head may be grouped the customs on goods imported to be sold at one place; under the second may be grouped the duties levied on goods exported to foreign countries. "All kinds of goods, even fire-wood and straw paid these duties excepting glass rings, brass pots and soap balls".[18] The places, where customs were usually collected, were rest-houses, water-sheds, salt-beds, market towns and roads frequenty by people.[19] The rates of commercial taxes levied on commodities are indicated by a few inscriptions.

10. 585 of 1219.
11. 59 of 1914; *Rep.*, 1915, para 44.
12. E. C., ix, Bn. 96.
13. 91 of 1918; *Rep.*, para 69,
14. 335 of 1921.
15. E. C., iv, Yl. 62.
16. 203 of 1921; *Rep.*, 1922, para 4.
17. E. C., iv, Cn. 97.
18. Rice, *Mysore Gazetteer*, I, p. 583.
19. E. I., vi, p. 232.

Among them the Koṇḍavīḍu inscription of Kṛṣṇadēva Rāya mentions the following rates:—

No.	*Articles*	*Unit taxed*	*Rate*
1.	Great millet	per bag	½ *paikam*
2.	Millet	,,	,,
3.	Salt	,,	,,
4.	Mangoes	,,	,,
5.	Myrobalan	,,	,,
6.	Fruits	,,	,,
7.	Brinjals	,,	,,
8.	Clearing nuts	,,	,,
9.	Mavine (a fragrant root like sarasaparilla)	,,	,,
10.	Green gram	,,	,,
11.	Black gram	,,	,,
12.	Bengal gram	,,	,,
13.	Horse gram	,,	,,
14.	Red gram	,,	,,
15.	Wheat	,,	,,
16.	Sesamum seeds	,,	1 *paikam*
17.	Oil seeds	,,	,,
18.	Black pulse	,,	,,
19.	*Anumula*	,,	,,
20.	Cotton	,,	,,
21.	Tamarind	,,	,,
22.	Gall-nuts	,,	,,
23.	Myrobalan seeds	,,	,,
24.	Yarn	,,	,,
25.	*Cāma*	,,	,,
26,	*Cirugadam* (root)	,,	,,
27.	Onions	,,	*1 damma*
28.	Turmeric	,,	,,
29.	Dammer	,,	,,
30.	Fenugreek	,,	,,
31.	Cumin	,,	,,
32.	Mustard	,,	,,
33.	New gunnybags	per s'atage	,,
34.	Green ginger	per bag	,,
35.	Lime-fruit	,,	,,
36,	Cocoanuts	,,	,,
37.	Jaggery	,,	*2 dammas*
38.	Cleaned cotton	,,	,,
39.	Ghee	,,	,,
40.	Castor oil	,,	,,
41.	Sangadi nuts	,,	,,
42.	Dry ginger	,,	,,
43.	Iron	,,	,,
44.	Steel	,,	,,

No.	Articles	Unit taxed	Rate
45.	Chisels	per bag	2 *dammas*
46.	Sugar	,,	4 *dammas*
47.	Areca nuts	,,	,,
48.	Cotton thread	,,	,,
49.	Betel leaves	,,	,,
50.	Long pepper	,,	6 *dammas*
51.	Pepper	,,	,,
52.	Sandal	,,	,,
53,	Cloves	,,	,,
54.	Nutmeg	,,	,,
55.	Mace	,,	,,
56.	Lead	,,	,,
57.	Tin	,,	,,
58.	Copper	,,	,,
59.	Women's garments	Double bullock load	1 *cavela*[20]

Such a multiplicity of taxes levied on articles of merchandise brought in enormous revenues to the government. Nuniz estimates the gross income from this source at Nāgalāpura alone at forty-two thousand *pardaos*. He says: "The duties in this land being (are) very great; since nothing comes through the gates that does not pay duty, even men and women as well as headloads of merchandise".[21] If Nāgalāpura alone yielded so much revenue it is not difficult to imagine the total revenue to the State from this source, for, as has been said earlier, there were a good number of towns and cities in the Empire. Besides, excise duties appear to have been levied on the manufacture of salt and the drawing of toddy.

4. *Profession taxes*

The principle of the levy of the profession tax appears to have been that a particular person was born in a community and was exercising a profession. His taxable capacity was also taken into consideration. The rates of taxes on him appear to have varied from place to place; But our evidence on the question is very slender. However the following details may be noted.

20. 242 of 1892; E. I., vi, p. 232.
21. Sewell, *op. cit.*, pp. 363-64.

Each S'āliya weaver for each loom ...	9 *panams*
Each blacksmith, carpenter, silver or gold smith ...	5 ,,
(including *koṭṭu, kiṟṟu aras'upēṟu* and *kānikkai*)	
Each chief potter ...	5 *panams* (including *tirigaiāyam*)
Each chief barber ...	4 *panams* (including *kariviāyam*)
Each chief washerman ...	4 *panams* (including *kallāyam*)
Each Kaṇṇkkāṇam (brazier) ...	6 *panams*
Each chief oilmonger ... (At Tiruvaigāvār, Tanjore District).[22]	20 *panams*
Each Mudali, Kaivinakkārar and other residents ... (At the seven pēṭṭais at Tiruvannamalai, N. Arcot Dt.)[23]	1 *panam*
Each Kaikkōlar ...	½ *panam* on each loom
Each S'enaikkuḍaiyār ...	½ *paṇam*
Each fisherman ...	½ *paṇam*
Each shepherd ...	½ *paṇam* on each *kuḍi*
Each oilmonger (Vṛddācalam, South Arcot Dt.) ...	½ *paṇam*[24]
Each Ceṭṭi, Kaikkōlar and Vāṇiyan ... (At Pulipparakoyil, Chingleput Dt.)[25]	2 *paṇams*
Each Kaccaḍavāṇiyar (family) ...	3 *paanṇms*
Each S'eṇbadavar (family) ... (At Pulipparakoyil, Chingleput Dt.)[26]	3 *paṇams*

There were taxes on certain officers of government :—

Each judge (*niyāyattār*) ...	5 *paṇams*
Each member of the village council (*maṉṟāḍi*) ...	½ *paṇam*
Each ceṭṭi proprietor ...	3 *paṇams* (including *aras'upeṟu, vaṭṭam* and *kanikkai*
Each principal collector of tolls ... (At Tiruvaigāvūr, Tanjore District)	4 *panams*[27]

Among others that were taxed appear to have been the village headman, shepherds, carpenters, washermen, potters uvaccaus, cobblers, musicians, gilders, todday-drawlers,

22. 59 of 1914; *Rep* , 1915, para 44.
23. MER 1928-29; *Rep.*, para 69.
24. 91 of 1918; *Rep.*, para 68.
25. 293 of 1910.
26. 294 of 1910.
27. 59 of 1914; *Rep.*, 1915, pera 44.

painters, goldsmiths, dombaras and slaves.[28] In some inscriptions in the Pudukkōṭṭai area we find reference to taxes like *piḷḷaivari*, *āḷvari* (poll tax) and *pērkkaḍamai*.[29]

5. *Industries tax*

In the Vijayanagar days the industries were all taxed. The basis of assessment appears to have been the net profit the owners of industries were expected to derive by running them. We get reference to the following rates of taxes during the period :-

Kaikkōḷa (weaver) with one working loom	...	4 *paṇams*
Weaver with loom that does not work (*aḍaitari*)	...	2 ,,
S'āliya (weaver) for each loom	...	9 ,,
Lace loom not in working order (At Tiruvaigavur, Tanjore Dt.)[31]	...	1½ ,,
Each loom for the paraiahs (At Vṛddhāchalam, South Arcot Dt)[31]	...	½ *paṇam*
Loom at Pulipparakoyil in Chingleput Dt.)[32]	...	2 *paṇams*
Loom at Vayalūr in thē same distrct[33]	...	3 ,,

Among the other industries that were taxed were grazing,[34] running of boats[35] and the manufacture of stamps for looms.[36] The diamond industry was also taxed.[37]

6. *Military contribution*

For the proper maintenance of the army and the forts in the Empire a few taxes were collected from the people.

28. T. V. Mahalingam, *op, cit.* p. 64.
29. I. P. S., 711 and 784.
30. 59 of 1914; *Rep.*, 1915, prra 41.
31. 91 of 1918.
32. 239 of 1911; *Rep.*, 1912, para
33. 364 of 1908.
34. E. I., viii, p. 304.
35. *Ibid.*
36. E. C., xi, Cd. 2.
37. Sewell, *op. cit.*, p. 389.

Of them were the *daḷavili*,[38] *daṇṇāyakasvāmya* and *daṇṇāyakarmagamai*,[39] *paḍaikāṇikkai*,[40] *kōṭṭaimagamai*[41] and *kōṭṭaipaṇam* or *kōṭṭaipadivu*.[42] The *paṭṭayakāṇikkai*, *vilvari* and *sūlavari* appear to have belonged to the same group.[43]

7. *Social and communal contributions*

Some social contributions were collected from the people either by the government or by recognised public and social institutions. Marriages were taxed during the period, as also marriage processions and marriage pandals. The group organisations like the *Iḍangai* and *Valangai* classes, Jangamas, Maḍigas and others were also taxed. The *Vibhūti kāṇikkai* and the *Piḍārivari* were local taxes collected for the benefit of the local temples.

8. *Judicial income and fines*

The Judicial department of the government got good revenues for the State. Fines were imposed for faults, annoyances, theft, adultery, injustice etc.[44] The right of dispensing justice was at times given to a few people, who collected the fines and other income and paid a contribution to the government. Rice describes the system in the following words: "The government used to appoint some aged men of the several inferior classes to be the heads of their respective castes and to administer justice. These headmen, on any complaint against their people, should investigate it and fine them if guilty, adjudging the fine or punishment proportioned according to the law and the nature of the case. For instance a husband convicting his wife of adultery was allowed to sell her to another man but of his own caste, and receive the price for

38. MAR, 1920; *Rep.*, para, 79.
39. MER, 1922, *Rep.*, para 43; 1911, para 51.
40. E. I., xvii, p. 112.
41. 510 of 1921; 373 of 1916.
42. TAS, v, pt. 3, p. 205.
43. E. I., vii, p. 304; 324 of 1911; SII, iv, No. 318.
44. E. I., viii, p. 304,

his use............The headmen collected fines, perquisites and presents from their castes from which they paid an annual tax to the government.''[45]

9. *Customary payment*

Besides, the government were entitled to certain customary payments and services. Among them were the *ūḻiyam*, *āḻamañji*, *sumai* etc.[46] The government demanded free labour for many of its undertakings in lieu of which it collected a tax known as the *veṭṭivari*. Though the kings remitted different taxes, they were not prepared to give away the *veṭṭivari*.[47] Similarly benevolences were demanded from the people almost regularly. This kind of compulsory collection is indicated by the terms *bedige* and *kaṭṭāyam*[48]

Method of collection

The government adopted different methods for the collection of taxes. The first was the one according to which the government appointed its own officers for the collection of the State revenues apparently from the ryotwari villages, an important feature of which was the ownership of land by individual persons. Officers were also appointed to collect the rent from the demesne lands. The second was the farming system according to which the taxes from a particular area were farmed out to the highest bidder. This is indicated by the inscriptions and literature of the period. Nuniz mentions that a particular gate at Vijayanagar was rented out for twelve thousand *pardaos* each year and no man could enter it without paying just what the renters asked for.[49] The same system appears to have prevailed in Golkonda also during the period. From the point of view of the government's responsibility for the collection of taxes this system was the simplest, but the

45. Rice, *Mysore Gaz.*, I, pp. 684-85.
46. S. I. I., v, No. 257; 87 of 1889; 335 of 1921.
47. 74 of 1913; *Rep.*, para 72.
48. E. C., xi, Cd. 2; E. I., xvii, p. 142.
49. Sewell, *op. cit.*, p. 366.

people appear to have suffered under it, for the renter paid his money regularly to the government and hence was not interfered with, though he oppressed the people with heavy taxes. As Moreland says, "the net payments made by the farmers-in-chief constituted the central revenue at the disposal of the king and his minister while within the 'government' or district the farmer-in-chief could farm out any possible source of revenue, the balance of receipts after making good his contract remaining at his own disposal. The financial system in South India was thus perhaps the simplest as it was the most oppressive which it would be possible to devise."[50]

A method, slightly different from the second, was the one where the government dealt with the local assemblies with regard to the collection of taxes. Remission of existing taxes or the imposition of new ones had to be made only with the consent of the bodies.

The last method formed part of the *Nāyankara* system. According to it a great part of the Empire was parcelled out among feudal vassals each of whom was made responsible for a fixed annual financial contribution and the supply of a military contingent during times of war. The feudal vassals who were known as *amaranāyakas* were required to pay in their contributions at the time of the celebration of the great *mahānavami* festival at the capital.

Section 2

Coins, Measures and Weights

The economic condition of a country is generally reflected in its currency system. With the foundation of the Vijayanagar Empire the currency system in South India became well regulated. "The matrix was adopted to the

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50. Moreland, *From Akbar to Aurangzeb*, pp. 272-73.

exclusion of the punch. A uniform weight standard of the *pagodas* was introduced, the shape and metallic value of the different coins were fixed and the coinage in general was sub-divided into several denominations."[51]

It may be noted in passing that though the currency system of the country was improved during the Vijayanagar period and the use of money economy became more regular, there were other articles which served as the media of exchange. Nicolo dei Conti says that inthe region about Vijayanagar, gold, worked to a certain weight. was used as money in the early part of the fifteenth century; in some parts pieces of iron worked into needles were used as currency, while in others stones, called the cats'-eyes, were used as the media of exchange.[52] Besides, as it still prevails in some parts of the country, money did not enter at all in trade transactions, for they were done to some extent by barter. Among the administrative reforms of Harihara II, one was with regard to the currency system. He issued an order that taxes must be paid in money instead of in kind. This made the use of money important and necessary and led to the minting of coins of different denominations. Though Kannaḍa was the language used for the legends on the coins, Nāgari also was largely used. Many symbols were used on the coins which afford interesting material for a study of the political and religious conditions of the period; but the scope of the present subject does not include a discussion of such questions. We are concerned only with the currency as a media of exchange.

It is the theory of modern economists that only a rich country can afford to have a gold currency and that such currency cannot circulate in India in view of the general poverty of the people. But it deserves to be noted that in the Vijayanagar Empire the currency system was based on gold though silver and copper coins were also in great use.

51. *Vijayanagara Sexcentenary Commemoration Volume*, p. 107.
52. Major, *India*, p. 30.

The coinage was divided into different varieties both in gold and copper. It is curious that we get only stray references to silver as a unit of currency. According to the description of Ábdur Razzāk the units of currency that were in circulation in the Vijayanagar Empire during the time of his visit to it were as follows:—

Gold

1. Varāha
2. Partāb—1/2 varāha
3. Fanam—1/10 partāb.

Silver

1. Tār—1/6 fanam

Copper

1. 1/3 Tār.

But this a very meagre account of the currency system of the country, for from the inscriptions of the period, it is evident that there were in circulation a large number of coins of different denominations. They may be classified as follows:

Gold

1. Gadyāṇa, Varāha, Poṇ, or Pagoda
2. Pratāpa
3. Kāṭi
4. Paṇa
5. Hāga

Silver

1. Tāra

Copper

1. Paṇa
2. Jital
3. Kāsu

The *gadyāṇa* to which we get frequent references in the Kannada inscriptions appears to have been the same as the *varāha* weighing about fifty to fifty-two grains in the Vijayanagar period.[58] The name *varāha* seems to have

58. E. I., viii, p. 130; see text, l. 28.

come down from the Cāḷukyas who had the *varāha lāñcana* or the boar device for their coinage. In some of the coins were figured Durgā and Varāha or the boar. It was also called the *pagoda* of which, descriptions are available in the writings of the foreign travellers who visited the Empire. Barbosa says the *pardao* was coined in certain cities of the kingdom of Narsyngua and that it was round and made in a mould. There appear to have been three varieties of the *varāha*, namely, *ghaṭṭivarāha*,[54] *doḍḍavarāha*[55] and *sudda-varāha*. The last of them appears to have been the same as the ordinary *varāha* weighing about fifty two grains. The relation between the *ghaṭṭivarāha* and the *suddavarāha* is not known; but it appears the ratio between the *ghaṭṭi-varāha* and the *poṉ* was 7 : 5. The *doḍḍavarāha* was double the ordinary *gadyāṇa* or *varāha*[56] both in its weight and value. A good number of this variety is not available. But the one that is figured in Elliot's *Coins of Southern India* was issued by Kṛṣṇadēva Rāya and weighed 119.7 grains.[57] We get reference also to the *cakra-gadyāṇa*, *cakra-varāha* and *kāṭi-gadyāṇa*. We do not know what they signified; but they were possibly forms of the same coin issued at different times.[58] Ábdur Razzāk mentions that a *gadyāṇa* was equal to ten *poṉs*[59] while Varthema mentions that it was equal to twenty *poṉs*. This leads us to the inference that the *gadyāṇa* referred to by Varthema was the double *gadyāṇa* or *doḍḍavarāha*. Barbosa thinks that the *pardao* (pagoda) was equal to three hundred and twenty *reis*,[60] while Paes says that it was equal to three huudred and sixty *reis*.[61] According to Barbosa the gold of the *pardao* was rather base.[62]

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54. S. I. I., iv, Nos. 274 and 279.
55. *Ibid.*, vii, p. 108.
56. 198 of 1922; *Rep.*, 1922, para 55.
57. Plate 3, No. 112.
58. S. I. I., iv, No. 262; vii, No. 298.
59. Elliot, *Hist. of Ind.*, iv, p. 109.
60. *Barbosa*, I, p. 191.
61. Sewell, *op. cit.*, p. 282.
62. *Barbosa*, I, p. 204.

The *gadyāṇa* also appears to have been known as *hon* or *poṉ*. An epigraph gives expression to the words ga 7 6 5 which is explained in words as seven *honnu* and five *haṇa* the symbol being evidently introduced to separate the two denominations *honnu* and *haṇa*.[63] A *poṉ* was equal to a *dēvarāya pagoda*, a *varāha* or ten *paṇams*.[64] The *rēkhai poṉ* appears to have been the same as the *poṉ* mentioned above.[65]

The *Pratāpa* or *Partāb* appears to have been half of a *gadyāṇa*.[66] The *kāṭi* was probably also a gold coin of a smaller denomination and was one-fourth of a *varāha*. An epigraph of 1463 A. D. mentions that four *kāṭis* made one *varāha*.[67]

But the coin that was in large circulation was the *paṇam* or *haṇa*. It was one-tenth of the *poṉ* in value as may be inferred from many inscriptions of which one mentions that 131 *poṉs* (*varāhas*) and 6¼ *paṇams* were equal to 1316¼ *paṇams*[68] It weighed about 5.2 grains. We do not know if it was the same as the *rūka* which was also one-tenth of a *varāha*.[69] Next to the *paṇam* appears to have been a coin called *cinnam*[70] which, according to the *Nellore Inscriptions* (Glossary), was one-eighth of a *pagoda*. There were also coins smaller than the *paṇa* that were in circulation. One of them was the *hāga* which was one-fourth of the *paṇa*.[71] This coin appears to have been also known as *kākiṇi*.[72] Another coin which was half the *hāgu* was called a *bele*.[73]

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63. E. C., vi, Mg. 48.

64. T. T. D. I., v, pp. 155-7; MER, 1920, para 40; 172 of 1916 A. S. R. (South India) iv, p. 88. *fn.*

65. T. T. D. I., iii, p. 350, No. 171.

66. *Ind. Ant.*, xx, Nos. 7 and 8.; E. C., xi, Mk. 31.

67. E. C., viii, Ng. 69.

68. 172 of 1916.

69. M.A.R. 1924, No. 100.

70. S. I. I., iv, No. 274.

71. E. I., ix, p. 267.

72. See E. C., iv, p. 31.

73. E. C., iv, Hg. 61.

The only silver coin of which we hear in the Vijayanagar period was the *tār* which Ābdur Razzāk says was one-sixth of a *paṇam.*[74] But Mahuan mentions a coin called *taurh* which was one-fifteenth of a *paṇam,*[75] while Varthema refers to a coin called *tāre* equal to one-sixteenth of a *paṇam.*[76] These two latter coins appear to have been the same while the *tāre* of Ābdur Razzāk could have been a coin of a higher denomination.

We have practically no knowledge about the copper coins during the period, though there must have been a few among them. Of them mention may be made of the *paṇam, jital* and *kāsu.* Among the other coins of smaller denominations appear to have been the *paikam, damma* and *cāvala.* The exact value of these coins is not known. There was besides a copper *tāra* which was one-third of a *paṇam* or two cash.

Besides these coins the currencies of foreign countries were also in circulation in the Empire, particularly in places where the foreign merchants had settled. The Portuguese coin that was in circulation in the country was the *cruzado.* There were two varieties of it, the full and the half, the former weighing about 60 gr. or 9 sh. 6 d. of English money and the latter 30 gr. or 4 sh. 10. 5 d.[77] The gold *dinar* of Egypt was 9 sh. 9 d. The *real* was a very small coin and was about 28 d.[78] The *florin* was a Florentine unit of currency which may be valued at 9 sh. 4.8561 d. of English money.[79] The *ducat* was a Venetian coin worth about 9 sh. 2.84 d. The *larin* which was in shape like a small rod of silver of the size of the pen of a goose feather was one-sixth of a *ducat*, and one *larin* was equal to about half of a *guilder.*[80]

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74. Major, *India*, p. 26,
75. JRAS, 1896, p. 344.
76. *Varthema*, p. 130.
77. *Barbosa*, 1, p.65, *fn.* 1.
78. *Ibid.*, p. 156 and *fn.* 1.
79. Yule, *Cathah*, iv, p. 58.
80. *The Indian Historical Quarterly*, xvii, p. 288.

Care was taken to see that there was no debasement of currency and the fineness of the gold in the coins was assured.[80a] An epigraph for instance mentions gold of three kinds of fineness 8, 8½ and 9. It is interesting to note that usually the money was paid in the presence of the village goldsmith who examined the fineness of the coins with the help of the touchstones kept for the purpose.[81] The goldsmiths were also the money-changers of the period, about whom we have an excellent description in the writings of Varthema. Referring to them at Calicut he says: "The money-changers and bankers of Calicut have some weights, that is, balance, which are so small that the box in which they stand and the weights together do not weigh half an ounce; and they are so true that they will turn by a hair of the head. And when they wish to test any piece of gold, they have carats of gold as we have; and they have the touch stone like us. And they test after our manner. When the touch stone is full of gold, they have a ball of a certain composition which resembles wax, and with this ball when they wish to see if the gold be good or poor, they press on the touchstone, and then they see in the ball the goodness of the gold, and they say: "*idu nannu, idu aga*", that is, "this is good and this is poor". And when that ball is full of gold, they melt it, and take out all the gold which they have tested by the touchstone. The said money changers are extremely acute in their business".[82] Vasco da Gama also refers to them in the following words: "The overseer of the treasury then sent for a changer, weighed it all, and proved it with his touchstones which they carry for that purpose, and with which they are very clever; and they set a value on each coin."[83]

80a. The inscriptions of the period refer to *vās'apaḍāta narpaṇam* (239 of 1936)

81. S. I. I., ii, 71; 494 of 1921.

82. *Varthema,* p. 168.

83. Vasco da Gama, *Three Voyages*,, p. 181.

Mint

The central mint was an important department of adminiatration. Ábdur Razzāk says that the usage of the country was that at a stated period every one throughout the whole Empire carried to the mint the revenue (*zar*) which was due from him and whoever had money due to him from the Exchequer received an order upon the mint.[84] Though the issue of currency was a monopoly of the State which issued as far as possible coins of particular denominations, we get reference to a multiplicity of coins as having been current in the Vijayanagar period. Barbosa refers to the minting of *pardaos* in many towns in the kingdom.[85] Thus we hear of *sakkarapaṇam*,[86] *vāḷāl vaḻi tirandān kuḷisai paṇam*[87] and others. From the provincial seats of Bārakūr and Mangaḷūr were issued a few *gadyāṇas*.[88] Likewise Lakkaṇṇa Daṇḍanāyaka a viceroy under Dēva Rāya II issued coins in his own name.[89] Not only that; private individuals were granted the right of issuing coins and owning private mints.[90] Thus the *nakara parivāras* appear to have been empowered to issue coins.[91] Such local currencies appear to have been in use only in the localities concerned, and hence gave some difficulty to the people. Caesar Frederick who had bitter experience of this system remarks about it: "When we come into a new governor's territory as every day we did, although they were all tributarie to the king of Bizenager, yet every one of them stamped a small coyne of copper so that the money we took this day would not serve the next day."[92]

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84. Elliot, *op. cit.*, iv, p. 109.
85. *Barbosa*, I, *p.* 204.
86. I. P. S , 751.
87. *Ibid.*, 699.
88. A· S. R., 1907-08, pp. 237-38.
89. MER, 1905, para 31.
90. MAR, 1929, Cp. 90.
91. Elliot, *Coins of Southern India*, No.78.
92. Purchas, *His Pilgrims*, x, p. 99.

Prices

All available evidence points to the existence of a great abundance of specie in the Empire. The luxurious extravagance exhibited at the palace ceremonials bear evidence to it. Paes observes that there was much money in the land, and the chiefs were very wealthy, and referring to Kṛṣṇadēva Rāya says: "The previous kings of the place (Vijayanagar) for many years past have held it a custom to maintain a treasury, which after the death of each, is kept locked and sealed, not to be opened except when the kings have great need". He further adds that the king (Kṛṣṇadēva Rāya) put in it every year ten million *pardaos* without taking from them one *pardao* more than for the expenses of his house.[93] Varthema also observes that the ruler of Vijayanagar was the richest king he had ever heard spoken of and that the Brahmans said that he possessed a revenue of twelve thousand *pardai* per day.[94] An idea of the wealth of Vijayanagar may be had from Hindu camp at the battle of Rakṣas Tangḍi. The plunder was so great "that every privateman in the allied army became rich in gold, jewels, effects, tents, arms, horses and slaves" and after the defeat "five hundred and fifty elephants laden with treasure in gold, diamonds and precious stones valued at more than a hundred million sterling...........left the city."[95]

There is abundant evidence to show that the prices of articles were very low in the Vijayanagar Empire. Even in the middle of the fourteenth century Vijayanagar had won a name as a rich country well supplied with all good things. Nikitin remarks about Calicut that everything was cheap there[96] Vasco da Gama is more explicit on the point. He says that corn was available in abundance at Calicut and that bread sold at three *reals* (less than a penny) and was sufficiant for the daily sustenance of a man.

93. Sewell, *op. cit.*, p. 282.
94. *Vārthema*, p. 129.
95. Sewell, *op. cit*, pp. 205-06.
96. Major, *India*, p. 20.

He adds: "Rice, likewise, is found in abundance.........a very fine shirt which in Portugal fetches three hundred *reis* was worth here only two *fanaos* which is equivalent to thirty *reis*."[97] Barbosa found rice selling very cheap in the country.[98] Paes also bears testimony to the cheapness of the articles in Vijayanagar. He describes it as the best provided city in the world and stocked with provisions such as rice, wheat, grains, Indian corn (jola or jowar) and a certain amount of barley, beans, pulses, horse gram, and many other seeds which grow in the country, and says that they were all very cheap. Fowls were sold at the rate of three per *vintem* (1. 7 d.), within the city while outside four could be had for the sum.[99] Likewise a *vintem* fetched six or eight patridges or twelve to fourteen doves.[100] Grapes were available in large quantities and sold at three bunches a *fanam* or *haṇa* and pomegranates at ten a *fanam*. Similarly sheep sold cheap for in the city markets twelve live sheep could be had for a *pardao* while in the hills the same coin would fetch fourteen or fifteen sheep.[101] If the salaries paid to the humbler servants of the government can have any relation to the general level of prices of the articles of daily consumption by them, tbe conclusion is inevitable that they sold cheap, for in the Vijayanagar days a knight with a horse and a slave girl was expected to live on a monthly allowance of four or five *pardaos* or twenty-two rupees eight annas or

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97. *The First Voyage*, p. 132.

98. *Barbosa*, I, pp, 195-97.

99. Sewell, *op. cit.*, p, 257.

100. *Ibid.*, p. 258.

101. *Ibid.*, p. 375. Ant. Schorer who was a junior Dutch factor at Masulipatam in 1609 and returned to Holland about 1615 has left an account of the Coromandel coast which contains a list of the prices of a variety of articles in the area. Though Masulipatam was outside the limits of the Vijayanagar Empire it is possible that the prices of those articles in the Vijayanagar Empire would not have been very different: According to his account the following is the list of prices of articles at Masulipatam;—

twenty-five rupees.[102]

It is curious that though there was abundant specie in the country the articles of consumption sold very cheap, thus disproving the quantity theory of money according to which abundance of specie cannot go hand in hand with low prices. But it may be noted here that though such articles of consumption required even by ordinary people were selling very cheap, the same may not be said of all the articles sold in the Empire. Though our data are not sufficient to warrant any definite conclusion on the subject, it appears pretty certain that the articles of luxury sold at a high price which could have been afforded only by the wealthier classes of people in the Empire.

"Pepper, 25 pagoda per bhaer; Mace, 8 to 12 Pagoda per man; Nutmeg, 33 to 60 pagoda per bhaer; Cloves, 5½ to 12 pagoda per man; Sandalwood, 100 to 120 pagoda per bhaer; *Aglenheut*, 7 to 9 pagoda per man; Lead, 17 to 20 pagoda per bhaer; *Speauter* or tintenago, 25 to 60 and 70 pagoda per bhaer; Tin, 75 to 80 pagoda per bhaer; Sulphur, 20 pagoda per bhaer; Alum, 12 pagoda per bhaer; Raw Chinese silk, 40 to 45 pagoda per mān; Twisted silk from China, 1 pagoda per seer; Untwisted silk (not so much imported as twisted). 1 pagodo per seer; Musk, 10 to 12 pagoda per seer; Vermillion, much in demand, but not imported in my time; Quicsilver, 20 to 25 pogodas per man; Camphor of Borneo, according to size and whiteness, 5 to 20 pagodas per seer; Chinese camphor, 4 *pagodas* per man.

All kinds of percelain-ware are also imported, chiefly little things, and are sold at great profit, each according to its quality; and for this reason I am not quoting their prices.

Red crimson cloth, 6 pagoda per gass, gass being equal to 1¼ Dutch ell. Red Carmosynen Kerdeys, 2 to 2¼pagodas per gass. Other colours of cloth as also of Kardeys are not much in demand, particularly black. Chinese velvet, 1 to 1¼ pagodas per gass; Chinese rolled damask, 5 to 6 pagodas per piece; Chinese plaited damask 2¼ to 2½ pagodas per piece; Chinese gold-wire, 1 pagoda each paper; Chinese *armosynen*, 1⅜ to 2 pagodas per piece, Chinese lacquer work is not much in demand. Some round losed boxes have been sold for ⅝ to 1 pagoda per piece; but not many. Tortoise shell, 70 to 80 pagodas per bhaer; Tinsel was sold in my time at from 3 to 4 pagodas perman; but it was very much soiled. There is also a demand for pretty beer glasses made of crytal, 2 or 3 of which are sold for 1 pagoda. Pretty mirrors could also be sold, but it is to be noted that the glass should be pretty, if it is not so, they want another to be put into the frame; *Benjeurya*, 6 to 8 pagoda per man; Wax, 2 to 2¼ pagoda per man; Sugar, 5 to 6 pagoda per bale each bale weighing about 6man" (*Indian Histori cal Quarterly*, xvi. pp. 834-35).

102. *Barbosa*, I, p. 210.

Debt and Interest

While on this subject, a few words may be said on debt and current rates of interest. The materials for a study of this interesting question are however very meagre. The epigraphs which refer to the rates mention them in connection with the endowments made to temples for the provision of specified offerings and worship and the supply of certain articles.[103] Further, information is confined only to the temple treasuries which gave loans to the people whenever they were in need of money. Besides, we get reference to debts and interest only in rural areas where agriculture usually preponderated. The rates of interest prevailing in the country appear to have varied from time to time and from place to place. The available evidence may however be indicated in the following table:

Reference	Date A. D.	Place (District)	Rate % per year	Kind of money	Monthly, Yearly, etc.	Remarks
E. C., iv, Hg. 61	1407	Mysore	30	Gold	Monthly	1 bale (½ a hāga) per month on half *gadyāa*
Ibid., Hg. 63.	"	"	"	"	"	"
Ibid, On, 160.	1492	Mysore	20	Gold	?	2 *haṇa* for every 10 *honnu*.
56 of 1892	1530	Trichinopoly		Gold	Monthly	1½ *paṇa* per 100 *poṉ* per month.
TTDI, v, No. 61.	1545	Chittore	12	Gold	Yearly	
561 of 1919	1547-8	Chingleput	12	Gold	Monthly	1 *paṇa* per cent on *poṉ*.
E. C., vi, K. P. S.	1569	Kadur	12	Gold	Monthly	Interest at 1 per cent on 12000 *varaha*.

The recovery of debts was as important a problem in those days as it is to-day and it received attention. Nicolo dei Conti observes that the debtor who was insolvent was everywhere adjudged to be the property of the creditor.[104] The foreign travellers say a few words regarding the

103. 529 of 1919.
104. Major, *India*, p. 31.

repayment of debts. Varthema for instance says that when "a man had a right to demand anything of another and he happened to meet him, he had only to make a circular line upon the ground and to make his debtor enter it which the latter never failed to do and the debtor could not leave this circle without satisfying his creditor or obtaining the remission of the debt". He also adds that if the debtor left the circle without paying the debt he was liable to be put to death by the king.[105] Though the above is a contemporary description of how repayment of debt was demanded of the debtors, yet the epigraphs or the indigenous literature of the period make no reference to the practice. On the other hand we hear from the inscriptions that the creditors appropriated the lands of the debtors wherever possible to the extent necessary to recover the debt. Information about the manner in which insolvent debtors were dealt with is not available.

Weights and Measures

It is necessary to say here a few words about the systems of weights and measures that prevailed in the Vijayanagar Empire. The epigraphs of the period contain reference to different units of weights and measures. The leading feature of the system is its wide diversity on account of which it is difficult to evaluate common standards for them. The difficulty is further increased by the introduction of foreign units of weights and measures in the principal centres of trade and the reference by the foreign merchants to the measuring units in terms of the foreign ones. Very little was done to introduce any kind of uniformity in the prevailing systems of measuring units, particularly in the weight and surface measures. The different units of measures usually bore the names of the local rulers or chiefs who introduced the measures, and no serious attempt appears to have been made to standardise them.

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105. *Varthema*, pp. 147-48.

The measuring rods that appear to have been in use were the *nāḍaḷavukōl*, *rājavibhāṭaṉkōl*, *gaṇḍarāyagaṇḍaṉkōl* and the *gaṇḍaragaṇḍaṉkōl* in the Chingleput district, the *ūñjalpārai sarivutaḍi* in the Coimbatore district, the *mūvāyiravaṉkōl* fifteen feet long, besides rods twenty thirty, and thirty-four feet long in the South Arcot district, the *rājavibhāṭaṉāḷapadinettaḍikōl* in the Tanjore district the *padiṉāṟaḍikōl*, the *paṉiraṇḍaḍikōl* and the *taḍi* in the modern Pudukkōṭṭai area.[106] The little reform tried to be effected by the government in the existing measuring rods in the Empire was with a view to make assessment and collection of taxes easy. As mentioned earlier an inscription of 1447 A. D. records that one Vāsudēva Nāyakkar, Tirumalai Nāyakkar of Magadai maṇḍalam revised the length of the rod for measuring the wet and dry lands. Up to 1447 the date the inscription lands in Magadaimaṇḍalam were measured by a rod eighteen feet in length and assessed. This procedure having affected *rājagaram* and given room for theft and ruin it was thought that if two feet more were added to the old measuring rod the tax would become easy of payment and the cultivators would be in a flourishing condition and be able to answer for the *rājagaram*. On their representations it was ordered that the length of the measuring rod should thereafter be fixed at twenty feet by increasing the length of the old rod by two feet, that the lands both wet and dry must be measured out again by the new rod and the changes entailed noted in the account books.[107] Likewise some reform was sought to be effected in the cubic measures, apparently with a view to effect uniformity in the collection of agricultural produce as tax in kind. Thus according to an inscription at Kugaiyūr in the South Arcot district one Immaḍi Rāyappa Nāyaka ordered that the measure *marakkāl* must be the measuring unit throughout the Magadaimaṇḍalam.[108]

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106. See ***Administration and Social Life under Vijayanagar***, by the author pp. 46-47 and p. 46 *fn.*

107. 97 of 1918; *Rep.*, 1918, para 69.

108. 96 of 1918; *Rep.*, para 69.

The different units of measures may be roughly indicated here in the following tables though there was difference between the same unit at different places :

Square Measure

Tamil :

576 feet	1 kuli
100 kuli	1 kāṇi
5 kāṇi	1 vēli
1 chei	1¾ acres
karai	?

In Tanjore :

144 sq. feet	1 kuli
100 kuli	1 mā
20 mā	1 vēli
1 vēli	6.6 acres
1 mā	.33 acre
1 kuli	.0033 acre

Telugu :

1 cubit	19.68 inches
32 cubits	1 rod
1 rod square	2756¼ square feet
1 junta	.0663 acre
50 juntas	1 gurtu or goru-3.1637 acres
8 gurrus	1 kuccala (25 acres)

Cubic Measures

Tamil :

2 ālakku	1 ulakku
2 ulakku	1 uri
2 uri	1 nali-1 padi (108 inches of cubic capacity)
8 nāli (padi)	1 kuruni (Marakkāl) ¼ cubic foot
2 kuruṇi	1 padakku
2 padakku	1 tūṇi
3 tūṇi	1 kalam

Telugu :

4 citti	1 sola-70 tōla of heaped rice
4 S'ōla	1 munta-280 tōlas of 3½ pucca seers
4 munta	1 kuñcam-1,120 tolas or 14 pucca seers
1 kuñcam	1 tūm, hundredweight about
20 tūm	1 candy Or puṭṭi or about a ton

Kannada :

4 S'ollage (manam)	1 ballam (2 seers)
4 ballam	1 kōlaga
20 kōlagas	1 khaṇḍūgam

Weights

Tamil :

3 tōlas	1 palam
8 palams	1 cutca seer
40 palams	1 viss or 3.0857 lbs
20 maunds	1 candy or bāram

Telugu :

1 pagoda weight	52¼ grains troy
1 tōla	180 grains troy
10 kuruck pagodas or 3 tolas	1 pollam
8 pollams or 24 tolas	1 pucca seer
5 seers or 120 tolas	1 viss
8 viss or 960 tolas	1 maund (100 pounds Tory)
20 maunds	1 candy or putti.[109]

109. Allen Butterworth and V. Venugopal Chetty, *A Collection of the Inscriptions on Copper Plates and Stones in the Nellore District,* Vol. III, pp. 1487 88.

CHAPTER VI

THE STATE AND ECONOMIC WELL-BEING

Section 1

Charity and Famine Relief

As has been said earlier an important duty of the state is to enhance the economic well-being of the people. Next to that comes the affording of timely relief to the poor and suffering people when they are in need of it. Works of this kind received due attention at the hands of the Vijayanagar sovereigns. Religious sentiment usually played a notable part in the organisation of poor relief; and the organisation of charitable works was considered an act of merit. Even in ordinary times charitable works were undertaken. The words of colonel Sykes are apposite when he says "in the universal sentiment of charity which is inculcated both by precept and example in all grades of society..............Beggars in India..........rarely appeal in vain for alms, indeed they ask with confidence if not with insolence, knowing devotional sentiment which inculcates the gift of alms in expiation of sin."[1] Not only was gift or charity considered an act of great merit, but any harm done to that was considered to be a great sin. The epigraphs usually say: "Whoso maintains this gift will derive the merit of performing countless horse sacrifices. Whatever sinner unable to let it live destroys it, will incur the sin of killing cows and Brahmans in the Ganges of parricide, and of causing a mother to eat the flesh of her son."[2] The inscriptions usually contain the imprecatory verse which ends by saying that one attains *svarga* by making gift; but one who protects it attains the abode of Acyuta.[3] Such gifts were made on important days like the *sankrānti*, lunar or solar eclipse and so on.

1. JRAS, 1860, p. 239.
2. For instance, Rice, *Mysore Inscriptions*, p. 26.
3. See E. C., vi, K p. 50.

The charitable acts done in the period may be classified under two broad heads, the unorganised and the organised. Under the former class may be grouped the grants and gifts to individuals or groups of persons like Brahmans, while under the latter class may be brought together the organised effort at poor relief undertaken by the state and philanthropic persons.

To make gifts to Brahmans was considered an act of great merit. The Vijayanagar epigraphs are replete with instances to show how the sovereigns took every opportunity to make grants of land and gifts to them. They also enumerate the different kinds of gifts that were made in favour of the Brahmans. Among them were the gifts of the golden egg, the golden wheel, the golden pot, the golden cow, the seven golden seas, the wishing tree, the golden cow of plenty, the golden earth, the golden horse-chariot, a man's weight in gold, a thousand cows, a golden horse, a golden-wombed Brahmā, a gold elephant chariot and the five ploughs.[4] The *ānandanidhi* (a pot of gold) was another such grant.[5] By making this grant Acyuta Rāya claims to have made Kubēras of Brahmans. The kings delighted in bestowing these great gifts again and again together with the grants associated with them.[6] Likewise the ascetics received gifts. Though Kṛṣṇadēva Rāya discourages indiscriminate charity to ascetis and says, "if a king through his partiality for letters gives large sums of money and villages to mendicant ascetics and those of matted hairs they may swerve from their necessary discipline which would increase in the State evils such as famine, disease and infantile mortality", advises, that in the case of such people it would be sufficient if the king showed *bhakti* (respect and devotion) to them, and thinks that the only evil resulting from such a treatment would be their suffering and no sin would accrue to the sovereign,[7]

4. E. I., i, p. 364, E., C. v, Hn. 13.
5. NER, 1904, para 24; 1923, para 81; 1920, para 89.
6. E. C., vii, Sh. 1.
7. *Āmuktamālyada*, IV, v. 242.

if much charity was shown to the mendicants. Mahuan gives an excellent description of these ascetics in the following words: "Here also is another class of men called *chokis* (Yogis) who lead austere lives like the Taoists of China, but who, however are married. These men from the time they are born do not have their heads shaved or combed, but plait their hair into several tails, which hang over their shoulders, they wear no clothes, but round their waist they fasten a strip of rattan, over which they hang a piece of white calico, they carry a conch-shell which they blow as they go along the road; they are accompanied by their wives, who simply wear a small bit of cotton cloth round their loins. Alms of rice and money are given to them by the people whose houses they visit."[8] Though begging by the ascetics and their wives might have been a feature of the life in the area visited by Mahuan it appears that celebate ascetics were engaged in taking alms in different parts of the country.

Many appear to have taken to street begging. They adopted, as they do even now, different methods for obtaining alms. The description of Barbosa may be cited here. He says: "When they wished to obtain alms, they took great stones, wherewith they beat upon their shoulders and bellies as though they would slay themselves before them to hinder which they gave them great alms that they may depart in peace"; "others carry knives with which they slash their arms and legs, and to those too, they give large alms that they may not kill themselves."[9]

So much sanctity was attached to acts of charity that many people made provision for affording relief to the needy. The most common method of doing so was the provision of watersheds, resthouses and water troughs for animals.

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8. JRAS, 1896, pp. 343-44.

9. *Borbosa*. I. p. 111.

Among the organised methods of doing charity was the making of provision for running a *catra* or *dharmacatra*.[10] We are told for instance that S'rigirinātha Vōḍeyār gave munificent donation for a *catra* or rest house, and Sangamā Dēvi, apparently his wife gave up the house she was in, together with the wells and fruit trees for the nineteen Brahmans of the *catra*, for their stay. It was arranged that for the ten Jangamas for whom the *nāḍ* people had provided in the *catra*, the Brahmans who attended to them and the two S'ūdra women to clean up, for all the thirteen persons the manager of the Brahman *catra* must collect from the *nāḍ* people the amount specified and provide rice for them. The funds that were in surplus were to be utilised for miscellaneous expenses and in course of time for the construction of houses.[11] A king made a *sarvamānya* gift of thirteen *vēlis* of land for the maintenance of a feeding house (*catra*) attached to the temples at Tiruvāmāttūr.[12] During the days of Venkaṭa II a powerful chief by name Dēvalu Pāpa Rāya, with three hundred Brahmans under him, gave hospitality to the pilgrims who went to, or came from Tirupati.[13] It appears the state had some control over these inns.[14] At times the temples also appear to have maintained such *catras*.[15] Provision was made by them for the distribution of food to mendicants and others on certain days of the month. Besides, some temples maintained schools and hospitals, and fed school children and gave relief to the suffering. Likewise private individuals made provision for the maintenance of *Rāmānujakūṭams*.

But it was during periods of famine that the relief given to the people was more in evidence. The cause of famines was usually the unfortunate circumstance that

10. E. C., x, Mb 39; iv, Cn. 185.
11. E. C., viii, Tl. 33.
12. 27 of 1925.
13. Heras, *Aravidu Dynasty*, I, p. 322.
14. E. C., x, Bn. 24.
15. E. C., viii, Tl. 103.

agriculture formed, as it does even today, almost the sole occupation of the mass of the people. Generally failure of rain was followed by a famine bringing in its wake rise in prices and occasionally the outbreak of epidemics like cholera necessitating the migration of people from the affected area to places less affected by them.[16] Unprecedented floods also resulted in such famines. In the last decade of the fourteenth century South India experienced a severe famine, on account of which the price of paddy rose very high and "innumerable skulls were rolling about and paddy could not be had even at the rate of ten *nāḻis* per *paṇam.*"[17] Its severity reached the maximum in 1396 and resulted in the depopulation of whole districts and was called *Durgādēvī* probably to distinguish it from famines of ordinary severity. In 1412–13 A.D. there was a famine in South India followed by another ten years later. About the middle of the fifteenth century the country, particularly the region covered by the modern districts of Ramnad, Trichinopoly and the Pudukkōṭṭai area experienced a famine (*kṣāmam*) apparently on account of the failure of rains. This appears to have continued for some time.[18] Some twenty years later the Telugu districts and the Deccan proper had a similar experience for about five years besides that of cholera on account of which the people migrated to Malwa and other places.[19]

In 1507 the modern Mysore territory experienced four tremours, which brought in their wake a great famine in 1509[20] A.D. Some two decades later there was another famine which appears to have lasted for about ten years. We are told in an epigraph of 1540 A.D. that famine in the

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16. 276 of 1907; MER, 1908, *Rep.*, para 73.

17. 239 of 1906, *Rep.*, 1907 para 53; (பிரமோதூத வருஷ மழையில்லாமல் வெண்தலை ஓடு உருண்ட கரிப்பாய் பணத்துக்குப் பதினாழி நெல்லு கொள்ளக் கிடையாமல்);649 of 1902.

18. I. P. S., 753.

19. Briggs, *Ferishta*, II, P. 493.

20. E. C., ix Nl. 71 and Kn. 21.

Mysore country was so rigorous that men ate men.[21] The historic battle of Rakṣas Tangḍi appears to have caused a famine in the region round the capital.

The years following the death of Venkaṭa II in 1614 A.D. were marked by the prevalence of famine conditions in South India apparently on account of the civil war that raged in the country. This encouraged a system of slave trade in the Empire, which, with the coming of the Europeans, increased. William Methwold, the chief in the English settlement at Masulipatam describes in the following words the effects of the civil war on the economic condition of the country: "Since the last King (of Vijayanagar) who deceased about fifteen years since, there have arisen several competitors for the Crowne unto whom the Naickes have adhered according to their factions or affections; from whence hath followed a continual civil war in some parts of the country and such extreme want and famine in most of it that parents have brought thousands of their young children to the sea side selling there a child for five *paṇams* worth of rice, transported from thence into other parts of India (i. e. the East Indies) and sold again to good advantage if the gains be good that ariseth from the sale of souls.[22]" President Rastell wrote to England about the famine as follows: "There was an universal dearth over all this continent of whose like in these parts noe former age hath record; the country being wholly dismantled by draught. . . . the poor mechaniques, weavers, washers, dyers, etc. abandoning their inhabitations in multitudes and instead of reliefs elsewhere have perished in the fields for want of food to sustain". An eyewitness described the famine in the Coromandel coast in the following words "Masulipatam and Armagon was sorely oppressed with famine, the liveinge eating up the dead and men dust scarsly travel in the country for fear they should be killed and eaten". Consequ-

21. E. C., iii, Cn. 108.
22. Foster, *English Factories in India, 1630-33*, Intro. xxxiii and p. 331.

ently the factors at Armagon were not able to make much profit since they were 'miserable tymes full fraught with the calamitie of war, pestilence and famine'[23]. This famine appears to have been more severe than that of 1540 A. D.

Thus famines seem to have visited the country at periodical intervals causing much hardship to the people. As said earlier some of them were caused be floods. In 1402-03 A.D. for instance parts of the modern Tanjāvūr district experienced unprecedented floods in the river Kāvēri which submerged vast areas of cultivated land, washed away the demarcation bounds and silted up the irrigation channels. Consequently cultivation of lands necessarily ceased.[24] The discontent among the people on account of the ill-adjusted or at times heavy taxation policy of the government led in a few cases to the migration of people from their original habitation which resulted in a few cases in the prevalence of famine conditions in the areas concerned.[24a]

There is some difference between famines of the modern day and famines of ancient and mediaeval times. In ancient and mediaeval India the hardship that resulted from famines was great and heartrending; conditions in the modern day are not so appalling. The earlier ones were more or less local in character: and relief measures could reach the place only at slow pace. But in the modern day with the progress in the quick means of communication and transport like railways and the spread of the banking and credit facilities immediate relief measures could be undertaken and resources supplied quickly. Hence in ancient and mediaeval India people affected by famines had to be allowed to drift for themselves so that many of them had to abandon their lands and possessions and seek shelter elsewhere.

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23. Foster, *op. cit.*, pp., xiv and xxi i i ; See also Moreland, *From Akbar to Aurangzeb*, pp. 204-19.

24. 422 of 1912; *Rep.*, 1913, para 52.

24a. 59 of 1914; *Rep.*, 1915, para 44; 92 of 1918; *Rep.*, para 68; 216 of 1917; *Rep.*, para 68; 246 and 254 of 1928-29; *Rep.*, para 79.

Though famines were frequent in the Vijayanagar period we do not know if there was a well-shaped famine code or famine policy to guide the government. We hear only of some instances where the government tried to afford relief to people during famine times. From such instances it is difficult to say that there was a clear-cut policy followed by the government in all such matters. But the available evidence points to the fact that the mediaeval sovereigns were as anxious as any one else to afford relief to the suffering people during times famine.

The sovereigns realised that in order to avert the recurrence of famines the irrigation facilities in the Empire must be improved. As has been mentioned earlier Kṛṣṇadēva Rāya emphasises the point in his *Āmuktamālyada*; and a survey of the irrigation activities of the Vijayanagar rulers has also been made.

During the famine of 1472 A. D. a certain ruler is said to have ordered those in charge of relief measures that the thousand bullocks belonging to the transport establishment maintained for his court should be used for affording relief and he himself "travelled incessantly to and fro between his dominions and Gujerat and Malwa which had escaped the visitation, bringing thence grain which was sold at low rates in the Deccan."[25] Likewise during the famine that visited the Deccan at the beginning of the fifteenth century the state tried to relive the sufferings of the affected people by opening to them the public stores of grain. Though these refer to the rulers of the Deccan a similar policy must have been followed by the Vijayanagar sovereigns also.

In this field of activity private initiative was not lacking. Among the private bodies or agencies that undertook relief work during such times mention may be made of the temple. For instance, when in the middle of the fifteenth century there was a famine in parts of South India,

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25. *Cambridge History of India*, iii, p. 385.

particularly in the region covered by the modern districts of Trichinopoly and Ramnad, and the Pudukkoṭṭai area two women who had fallen into debt and were harassed by their creditors sought the protection of the trustees of a local temple who relieved them from the oppressions of their creditors.[26]

Section 2

Standard of Life

For estimating the standard of life among people in the middle ages we have to draw largely from the writings of foreign travellers who visited the country. The life of the court and the upper classes attracted the notice of the foreign chroniclers to such an extent that they devoted more attention to its description than to that of the life of the unostentatious poor. But one point deserves to be noted; the statements of the chroniclers who belonged to different periods and places give expression to the same views about the conditions of the different classes of people. The general feature of the economic life of the people appears to have been that the nobles as a class lived a life of luxury while the mass of the people were generally poor. The standard of life among the nobles and the common people may be examined from three aspects: housing, food and dress.

Housing

From the available evidence it appears that the aristocratic classes lived in excellent and well-furnished houses. According to Barbosa the Vijayanagar emperor had luxurious palaces with many well-built enclosed courts and open spaces and water tanks in great numbers. The governors also lived in similar houses.[27] Paes says that from the second line of walls at the capital to the king's

26. I. P. S., No. 753.

27. *Barbosa*, I, p. 202.

palace there were many streets and rows of houses with many figures and decorations pleasing to look at.[28] The wide street in front of the Virūpākṣa temple at Hampi was a beautiful one with excellent houses with balconies and arcades.[29] 'Abdur Razzāk mentions "a sort of bazaar" which was more than three hundred yards long and twenty yards broad on both sides of which were houses (*khanaha*) and fore-courts (*safhaha*).[30] Paes says there were a hundred thousand dwelling houses at Vijayanagar, all onestoried and flat-roofed for each of which there was a surrounding wall.[13] In some places the houses appear to have had upper stories (*mālige*).[32] We get reference to *māḍaviḍu* and *kūḍaviḍu*.[32a] The general plan of the houses appears to have impressed the chroniclers as good. According to Ábdur Razzāk the houses at Bidrur looked like palaces.[33] Similar houses were to be seen at Nāgalāpūr and other important centres in the Empire.[34]

But the poorer classes of people lived in small thatched and straw houses with only small doors. According to Linschoten the doors of these houses were so small that men had to creep in and out. He says: "Their house-hold stuffe is a mat upon the ground to sleepe npon, and a pit or hole in the ground to beat their rice in, with a pot or two to seethe it in, and so they live and gain much, as it is a wonder."[35] Barbosa says that they were nonetheless very well built and arranged according to occupations in in long streets with many open spaces.[36] The flooring of many of these houses was of mud which was however kept

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28. Sewell, *op. cit.*, p. 254.
29. *Ibid.*, p. 260.
30. Elliot, *op. cit.*, iv p. 111.
31. Sewell. *op. cit.*, p. 290.
32. E. C., x, Kl. 150.
32a. 685 of 1919.
33. Elliot, *op. cit.*, iv, p. 104.
34. Sewell, *op cit.*, pp. 290 and 246.
35. Purchas, *His Pilgrims*, p. 262.
36. *Barbosa*, I, p. 202.

hard and clean with the smearing of cowdung and water.[37] In the construction ot the houses the wood of the coconut trees was utilised wherever it was available, particularly in the coastal areas.[38]

Food

We get a curious list of the dietary of the Vijayanagar people. Meat was largely used by all classes of people except the Brahmans, Vaisyas Jains and Lingāyats.[39] The flesh of sheep, goats, fowls, hares, and birds like partridges, etc., was used by some classes of people. Fruits such as oranges, lemons, citrons, melons, dates, fresh and dried, and many others were used by the middle class people. In the daily diet of the people butter was used on a large scale which was mixed with honey, rice, milk, sugar, dishes or fruits etc.[40] The diet of the common people appears to have been very simple. We hear of the provision of *kambu* for meals for Brahman travellers.[41] Plantain leaves were used for taking food.[42] The leaves of areca palms also appear to have been used for taking food.[43] We also hear of public eating houses provided with stone slabs with hollows in them in which rice food and curries were served[44]

Dress

About the dress of the people of Vijayanagar we get good accounts in the writings of the foreign travellers though their remarks regarding the "nakedness" of the common people have to be accepted only with some reservation. The well-to-do people in the Empire wore "certain clothes, as a girdle below wound very tightly in many folds

37. Pietrodella Valle, *Travels*, ii, pp. 230-31.
38. *Barbosa*, ii, p. 91
39. *Ibid.*, i, pp. 217-18; Sewell, *Op. cit.*, p. 242.
40. *Ibid.*, i, pp. 217-18.
41. 152 of 1901; 109 of 1920.
42. 91 of 1912.
43. *Āmukta.*, IV, verse 35.
44. Gribble, *A History of the Deccan*, I, pp. 70-71.

and short white shirts of silk or coarse brocade which are gathered between thighs but open in front." On their heads they carried small turbans. Some wore silk or brocade caps.[45] According to Caesar Frederick the dress the people used at Vijayanagar was of velvet, satin, damask, scarlet or white bumbast cloth according to the status of the person. They also wore caps made of velvet, satin, damask or scarlet. Wool was very rarely used, perhaps on account of the great heat of the country.[47] Some of the people used rough shoes without stockings.[48] But the ordinary people did not use shoes. The higher classes of people used umbrellas. About the dress of women Barbosa says: "The women wear white garments of very thin cotton, or silk of bright colours, five yards long; one part of which is girt round them below and the other part they throw over one shoulder and across their breasts in such a way that one arm and shoulder remain uncovered......They wear leather shoes well embroidered in silk; their heads are uncovered and the hair is tightly gathered into a becoming knot on the top of the head.[49] Many people in the country wore jewels and ornaments "in their ears, and around their necks, arms, wrists and fingers".[50]

The fact that many people wore only a cloth round their waist has made some foreign travellers speak of the nakedness of the Indians. Varthema for instance says that the people went quite naked with the exception of a piece of cloth about their middle.[51] The insufficiency of clothing was not exactly due to poverty, for the climate of the country is such as could not allow the use of much dress. The important and perhaps the great difference

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45. *Barbosa*, I, p. 205.
46. Purchas, *His Pilgrims* X, p. 99.
47. Major, *India*, p. 22.
48. Sewell, *op. cit.*, p. 252; Purchas, *His Pilgrims*, x, p. 99.
49. *Barbosa*, I, pp. 207 and 208.
50. See Elliot, *op. cit.*, iv, p. 109; *Barbosa*, I, p.207 Sewell, *op cit.*, p. 273, etc.
51. *Varthema*, pp. 121-22 and 129.

between the rich and the poor in their dress was in its quality aud variety. As Vasco da Gama says,"the richer men dress in the same manner, but they make use in silk stuffs, reddish or scarlet or of other colours as seems good to them".[52]

It remains for us now to gather the threads of the discussion and review in brief the economic condition of the people. Unfortunately our evidence on this question is incomplete and one-sided and is apt to lead us to hasty conclusions. We depend for our information largely on the observations of the foreign travellers who visited various parts of the Empire in different periods. Making due allowance for differences of time and place we may conclude that though the country was very rich and its resources were great, there was great disparity in the condition of the various classes of people. Poverty amidst plenty, may be a true description of their condition. While the nobles lived in luxury and were lavish in their tastes and expenditnre and indulged in wasteful extravagance and reckless expenditure in perfumes, unguents and personal ornaments, the mass of the people lived under conditions of extreme poverty even during normal times, not to speak of periods of famine or drought. The remarks of Nikitin are specific and forceful on the point. He says: "The land is overstocked with people; but those in the country are very miserable, while the nobles are extremely opulent and delight in luxury". Varthema notes with particular care the miserable condition of the people in Malabar, refers to the poor accommodation of their houses the value of which would be half a *ducat* each or one or two *ducats* at most. Nuniz also refers to the poor condition of the ryots on account of the oppression of the nobles.[53] Commenting on such a description by Nuniz, Sewell says: "This statement, coming as it does from a totally external source, strongly supports the view often held that the ryots of Southern

52. *The First Voyage*, p.133.
53. Sewell, *op. cit.*, pp. 373 and 379.

India were grievously opressed by the nobles when subject to Hindu Government. Other passages in both these chronicles, each of which was written quite independently of the other confirm the assertion here made as to the mass of the people being ground down and living in the greatest poverty and distress".[54]

The distress of the people may partly be explained by the taxation policy of the government. Sir Thomas Munro in one of his letter writes: "However light Indian revenue may be in the books of their sages, only a sixth or a fifth, in practice it has always been heavy.............No person who knows anything of Indian revenue can believe that the ryot, if his fixed assessment were only a fifth or fourth of the gross produce, would not every year, whether good or bad, pay it without difficulty, and not only do this, but prosper under it beyond what he has ever done at any former period.........I never could discover the least foundation for the assumption that the Hindu assessment had been raised by the Mahomedan conquest, or for believing that the assessment which we find, did not exist before that period......... The few imperfect records which have reached us of the revenue of Vijayanagar, the last of the great Hindu powers, does not show that the assessment was lighter under that government than under its Mahomedan successors.'"[55]

A study of the inscriptions of the period leaves on us the general impression that taxation was heavy at least in certain periods of the Vijayanagar history. The people were consequently forced at times to sell their lands under distressing circumtances.[56] On a few occasions the people joined together and fixed the rates of taxes which they would pay to the government. In 1429 at Tiruvaigāvūr in the Tanjore district people said in one voice: "From the

54. Sewell, *op. cit*,. p. 379 *fn;* see also *India Before the English* by the same author, pp. 36-58.

55. *Minutes of Sir Thomas Munro*, pp. 237-38.

56. 50 of 1916; *Rep.*, para 64; *I. P. S.*, 733.

time of the Kannaḍiyas (Hoysalas) the district had been declared the *jīvitaparru* of the (temple) servants, taxes were not collected by one single person; the lands were leased out (*aḍaiōlai*) to other persons and *puravari* taxes were collected. In this way the whole district came to be ruined." After reviewing in a preamble their difficulties on account of heavy taxation they fixed the rates of taxes to be levied on their lands taking into account the nature of the tenure under which the lands were held. They also decided that nobody should collect the taxes otherwise than as in the schedule without the consent of the assembled body (*maṇḍala*) of people.[57] In another place the people decided that they would not give shelter to those who were in charge of the collection of taxes, or write accounts for them or agree to their proposals and that if any one proved a traitor to the country by acting against the setttlement he must be stabbed.[58] In yet another place the people "drafted a bond of union to the effect that if the *pradhāni vaṉṉiyar* and the *jīvitakkārar* used any coercive measures against them, if landed proprietors among the Brahmans and Vellāḷas caused any harm to them through the revenue officials, if any of them submitted to unjust taxation or disseminated false tales, caused any damage to documents (presumably formulating their communal rights) if any one in the *maṇḍalam* accepted service as an accountant or was guilty of *nāṭṭudrōham*, the assemblies of those communities shall, as on this occasion, meet and decide the form of punishment to be meted out to the offenders."[59]

The people at times refused to pay the taxes and migrated in a body to other places where taxation was perhaps lighter. Consequently the taxes had to be reduced and the emigrants called back to resettle in their original places. In this particular case the wise counsel of

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57. 59 of 1914; *Rep.*, 1915, para 44.
58. 92 of 1918; *Rep.*, para 68.
59. 246 and 264 of 1928-29; *Rep.*, para 79.

Kṛṣṇadēva Rāya appears to have been followed, for, according to him a king would never be prosperous even though he conquered the seven *dvīpas* if he had an officer who did not call back the subjects when they left the state on account of suffering.[60] Thus when about 1446 A. D. the *valangai* and *iḍangai* communities in the modern South Arcot district, unable to bear the weight of the taxes *iṉavari* and *iḍangaivari*, migrated to other places, and the area consequently became depopulated, the king authorised Nāgarasa Uḍaiyār to cancel all the taxes.[61] Likewise in the Salem district at the beginning of the sixteenth century the people suffered under heavy taxation and hence migrated from the country. To stop such migrations Tyāgaṇa Nāyaka, who was probably the local governor granted a pledge (*aḍaiōlai*) to them.[62] Almost at the same time one Trinētranātha Kacciṛāyar, a governor in the modern South Arcot district, had to revise the rates of taxes since the people had begun to migrate from the area.[63]

Besides the taxation policy of the government, there were other important factors that affected the well-being of the people. It is surprising to see that after the historic battle of Rakṣas Tangḍi the people never recovered from the blow. The history of the world records even more decisive battles, but it does not seem that they affected the economic condition of the respective countries and demoralised the economic resources of the people to the extent to which the battle of 1565 did in South India. The fact appears to be that the Hindu defeat at Rakṣas Tangḍi gave a *coup de grace* to a people suffering under many economic disabilities in an overgrown Empire. The battle gave the final blow to the already disorganised economic life of the country.

60. *Āmukta.*, IV, v 237.
61. 476 of 1921; *Rep.*, para 46.
62. 422 of 1913.
63. 246 and 247 of 1916; *Rep.*, paras 64 and 66; see also 413of 1922; IPS, 748; 492 of 1915; 340 of 1926 and 130 of 1933-34.

This appears to have been due to a variety of causes In the modern day with the progress of the monetary systems and the growth of banking facilities and credit instruments the necessity for hoarding the precious metals, particularly the yellow one is fast disappearing. But in ancient and mediaeval days when the currency systems were in a rude stage, the precious metals had to be hoarded for utilisation during times of need. Kṛṣṇadēva Rāya in his *Amuktamālyada* divides the income of a king into four parts and lays down definitely that one part must be used for extensive benefactions and enjoyment, two parts for the maintenance of a strong army and the remaining one part added to the treasury.[64] The advice appears to have been actually followed in the period and Paes referring to the hoarding of wealth by the kings says: "The previous kings of this place for many years past have held it a custom to maintain a treasury which treasury, after the death of each is kept locked and sealed in such a way that it cannot be seen by any one, nor opened, nor do the kings who succeed to the kingdom open them or see what is in them. They are not opened except when the kings have great need and thus the kingdom has great supplies to meet its needs. This king (Kṛṣṇadēva Rāya) has made his treasury different from those of the previous kings and he puts in it every year ten million *pardaos* without taking from them one *pardao* more than for the expenses in the houses of his wives, of whom I have already told you that he keeps near him 12,000 women; from this you will be able to judge how great is the richness of this kingdom and how great the treasure that this king has amassed."[65] The hoarding of money was a necessity in those days to meet unexpected demands. But the regular withdrawal of a good part of the money from circulation in the country and its hoarding as idle reserve made it poorer to that extent. The active circulation of

64. Canto IV, v, 238.

65. Sewell, *op. cit.*, p, 282.

money within the country is a sure index of the prosperity of the country. Though the policy of hoarding was inevitable in those days its effects on the economic well-being of the country cannot be lightly set aside. Further such large hoardings served to tempt foreign invasions.

An important item of expenditure was the military. Kṛṣṇadēva Rāya says in his *Āmuktamālyada:* "The expenditure of money which is utilised in buying elephants and horses, in feeding them, in maintaining soldiers, in the worship of Gods and Brahmans and in one's own enjoyment can never be called an expenditure".[66] Reference has been made earlier to the huge forces maintained by the Vijayanagar sovereigns and the numerous feudal levies summoned by them on occasions of war. On the military expenditure during the days of Acyuta Rāya, Nuniz observes: "Of these sixty lakhs that the king has of revenues every year he does not enjoy a larger sum than twenty- five lakhs for the rest is spent on his horses and elephants and foot- soldiers and cavalry whose cost he defrays".[67] The conditions of the period necessitated such huge unproductive expenditure on the army. But it is painful to note that in spite of its large size the army was unorganised and inefficient. But that policy necessitated the withdrawal of a substantial part of the State revenues from productive uses.

Religion permeated the lives of the people to a large extent during the period; and the kings spent a good part of the revenues in the construction of new temples, renovation of old ones and in making endowments for festivals and worship in them. Many of the numerous religious edifices that stand to this day in South India are the results of the religious impulses of the kings and their governors. Nuniz says that Mallikārjuna Rāya spent one-fifth of his revenues on the temples. It is said that Athens grew at the expense of

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66. Canto IV, V. 262.
67. Sewell, *op. cit.*, pp. 373.74.

Greece. Likewise cities like Vijayanagar grew in size with buildings, population and amenities over which enormous sums of money were spent. Such impulses of course gave great encouragement to the allied arts of architecture, sculpture and painting and gave employment to artisans and other workers in those lines. Such a large expenditure on buildings, religious and civil, resulted in a drain on the public purse thereby starving many productive enterprises in the country. But such were the impulses and conditions of the age.

The items of expenditure for the people do not appear to have been many. The occasions for their expenses were usually personal and occasionally social. Many of the people in the urban areas lived an artificial life and cultivated certain habits largely influenced by the life in the court and the houses of the nobility which entailed costly living. Some people must have taken to pilgrimages in spite of the absence of quick means of communication and conveyance. Marriages must have consumed a good part of their resources, and we hear of the sale of lands to meet the expenses connected with the same. High or low, rich or poor, the people decked themselves with as many jewels as they could afford. They do not appear to have had other means of spending money as at the present day. It is however reasonable to assume that the majority of the people occupied more or less the same economic condition as they do now. But one thing may be said: the people in the Vijayanagar days generally lived a contented life unlike their descendants of the modern day whose minds are agitated by many economic questions.

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INDEX

Abdulla, Sultan of Golkoṇḍa, 130.

Abdur Razzāk, on the breeding of elephants at Vijayanagar, 111; on coins in Vijayanagar, 176; on the elephants of Dēva Rāya II, 110; on the extent of the Vijayanagar Empire, 1; on the fertility of land, 44; on the harem of Deva Rāya II, 19; on housing in Vijayanagar and Bidrūr, 199; on jewellery, 99-100; on the mint, 181; on the organisation of the merchant guilds, 32; on the population in the Vijayanagar Empire, 6; on ports in the Vijayanagar Empire, 141; on slavery, 20; on the strength of the Vijayanagar army, 9; on temples, 39; on towns in the Vijayanagar Empire 3; on trade at Calicut, 156, 157; on the value of a *gadyāṇa*, 177; on the value of a *tār*, 179; on the Vijayanagar Secretariat, 13; on writing on palm leaf, 95.

Ācārya, master craftsman, 107.

Accukkaṭṭu (maṇavāri) lands, 71, 77.

Acyuta Rāya, 12, 25, 87, 207; harem of, 19; Rice on the revenues under, 162.

Aḍai ōlai (lease deed), 42.

Aḍaippu, 164.

Aḍai tari, 171.

Adapanayaque, the lord of the country of gate, 95.

Aḍavāni (Adoni), 5, 152; a centre of the Vira Baṇajigas, 31.

Aden, 142, 143; export of cocoanuts to, 48, 111, 115; imports from, 113; inport of gold from, 110.

Adhyayana vṛtti, 87.

Ādil Shāh of Bijāpūr, 120, 121, 122; and Albuquerque, 112.

Affonso de Albuquerque, and Kṛṣṇadeva Rāya, 111-112, 120; on Cochin and Calicut, 144.

Africa, exports to the coasts of, 114.

Agambadiyas, 158

Agriculture, methods of, 59-74.

Agricultural labour, 62-67; manufactures 93-95; production, articles of, 44-48.

Ahadis, 14.

Ahicchattra, 31.

Ais'varyapura 'mother home' of the *Nānādes'is*, 30.

Aiyappa Nāyaka, brother of Dāmarla Venkaṭappa, 133.

Ajaparcatimapa, 12.

Alexandria, 123.

Amaram, 83.

Amaramagaṇ (l) lands held by the *nāyaka*, 89.

Amaranāyaka tenure (same as Nāyankara tenure), 88

Amaranāyakas, 174.

Amboyana, abandonment of the English factory at, 128; massacre of, 130.

Āmuktamālyada the, 49, 79, 153, 155, 197, 207; mention of guilds in the, 29.

Anandanidhi, 191.

Anantas'ayanam, 5.

Anegundi, basket boats at, 147-8.

Anevidda, a centre of the Vira Baṇajigas 31.

Ankaya Nāyaka, 75.

Ankola, 5, 116, 121.

Annigere, a centre of the Vira Baṇajigas, 31.

Ant Schorer, on prices at Masulipatam, 183-4 n.

Appa Koṇḍaja, Secretary of Venkaṭa II, 129.

Appa pillai, 78.

Arabia, export of rice to, 74; export of precious stones to, 114, 116; horses from, 111, 120.

Arabs, a commercial community, 118-119.

Āraga, a centre of the Vira Baṇajigas, 31.

Arai kāval (Superintendent of Stores), 40.

Aras'ar Tipparas'ar, the mahāpradhāni, 58.

Archipelago, 134; the Cettis in the, 137.

Armagon, 135; English trading establishment at, 131, 132; famine in, 195.

Ārumuga Mudali, 131.

Ashi, 119.

Assessment, concessions in, 75-78.

Aṣṭa bhoga tejah svāmya, 84.

Ava, imports from, 113.

Ayyavole, a merchant guild, 30, 31.

Ayyavole Sālumūlas, a merchant guild, 30.

Babylonia, supply of emerald by, 95.

Bac(k)anūr, (Bārakūr), an important port in the Canara coast, 5, 143; issue of coins from, 181.

Baden Powell, on the sale of land, 72.

Bahmani Kingdom, 150.

Bahmani Sultans, 110.

Balimūt, a port in the Malabar coast, 143.

Bali Reḍḍi, formation of a village by, 77-8.

Banavāsi, 151.

Banda 122; abandonment of the English factory at 128.

Baniyas, a trading community, 138.

Bankāpūr (a), 5, 45, 151.

Bantam, 126, 131, 132, 134; export of calico cloth to, 117; Pettapoli, subject to, 130.

Baindur (Majandur), 5.

Barbosa, Duarte, on the Ceṭṭis, 137; on the beggars, 192; on the condition of the agricultural serf, 64; on the cultivation and use of rice, and wheat, 45, 60-61; on the dyeing industry, 94; on the dress of women, 201; on duelling, 18; on false diamonds, 96; on the Indian merchants 138; on justice in Vijayanagar, 157; on the kingdom of Narasinga, 44; on the manufacture of sugar, 93; on the minting of pardaos, 181; on the Pardao, 177; on the payment of wages to workmen, 108; on the population in the west coast, 6; on ploughing animals, 67; on piracy in the Indian coast, 149, 150; on the price of rice, 183; on the punishment of the *nāyakas*, 89; on the right of fishing at Kāyal, 144; on river communications 148; on the ships of the Muslims, 146; on slavery, 20, 21; on the strength of the Vijayanagar army, 9; on trade in Goa, 142; on trade at Honāvar, 143; on trade in Vijayanagar, 155; on trade in rice; 115; on the trade route between Vijayanagar and Pulicat, 151; on the use of the cocoanut palm, 94-5; on the use of furniture in houses, 102; on the use of ivory for swords, 101; on the use of shoes, 103; on the Vijayanagar army, 13-14; on villages and towns in the Vijayanagar Empire, 3, 4; on the wealth of temples, 35.

Barcelor (Ba(o)srur, 5, 18, 121; and the Portuguese, 119; Retilim cherim (ceṭṭi) Governor of, 120.

Bardez, 120.

Pallagate diamonds near, 96.

Bargatin, 149.

Barnett, Dr. on the Vira Baṇajigas, 31.

Barakūr and the Portuguese, 119.

Basavaga (bond-servant), 20.

Basket boat, 147.

Basrur (Barcelore), 5, 118.

Bathecala, 67.

Bednur (Bidamur), 5.

Bengal, 119, 144, 149; spices and drugs from, 112-13; trade of, with SanThome 122.

Berbera import of gold from, 110.

Bhaṇḍāra (Kāra) revenue villages, 86.

Bhaṇḍāragrāmas, royal villages, 85.

Bharangi, 5.

Bhāskara Bavadura, construction of a tank by, 49-50.

Bhatkal, (Bhaticala), a port in the Canara country, 5, 45, 142-143, 152, 153; and the Portuguese, 122; export of dye stuffs from, 115; export of metals from, 116; road from, to Vijayanagar, 151; sugar at 93.

Bhaṭṭavṛtti, 87.

Bhoga āyakam, 38.

Bhuvanagiri, 12,

Bijāpūr, Ādil Shāh of, 120.

Boats, making of, 103

Bodial (Budehal) cloth of flax in, 106.

Borneo, spices and drugs from, 112-13; camphor from, 145.

Bosrūr (Barcelor), 121.

Brahmadeya, 25, 86-7.

Brahmans, trade by the, 138;

Breeding places in the Dekkan, 67.

Brickceden, President of the English settlements of the East, 130-31.

Brigantins (fustas) small ships, 147.

Bukka II, 50.

Bukkaṇṇa Voḍayār, 33.

Bukka Rāya, 55.

Burhan -i- Masir the, on the ports in the Vijayanagar Empire, 141; on the revenues of Sadās'iva Rāya, 163.

Burnell, 163.

Caesar Frederick, on customs duties, 157; onthe dress of the people at Vijayanagar 201; on the issue of coins, 181; on the means of conveyance, 153; on Nāgapaṭṭiṇam, 145; on the results of the battle of Rakṣas Tangdi, 123-124; on the trade of San Thome, 122, 145.

Calico cloth, kinds of, 117.

Calicut, an important port in the Malabar coast, 67, 105, 143, 144, 149; Abdur Razzak on trade at, 156, 157; cultivation of rice at, 61; English factory at, 130; Exports from, 116; money changers at 180; Muslim population at, 118; prices at, 182-183; sapphire at, 96; Varthema on ships at, 146; Zamorin of, 130.

Cālukyas, coins, of the, 177.

Camatra Pulicat textiles in, 106.

Cambay, 149.

Cambaya, 44, 142, 144, 145, 146; import of elephants to 110.

Canals, use of the, 153-154.

Candavūru a centre of the Vira Baṇajigas, 31.

Candragiri, 5, 124, 151; a centre of the Vira Baṇajigas, 31.

Candragutti a centre of the Vird Baṇajigas 31.

Cāma Nṛpāla, the Commander-in-chief of Deva Rāya II, 55.

Canara, rice cultivation in the coast of, 45

Cannanor(e) an important port in the Malabar Coast, 124, 143; exports from, 116.

Carnad, and the portuguese, 119-120.

"Castell" Danish port at Tranquebar, 129.

"Castle Geldria" Dutch port at Pulicat, 126.

Catamarans, 103, 148.

Caturangapaṭṭiṇam, (Sadiravāhanapaṭṭiṇam Sadras) a port in the coromandel coast, 145; a centre of the Vira Baṇajigas, 31; customs at, 157.

Cāvadi, *Karaṇika* of, the, 69.

Cereals, cultivation of, 45-6.

Ceṭṭis, (Chatis, chetti, Chetige, Chetti), a merchant community, 136-37, 138, 139, 144.

Ceylon, 128, 144, 149; Cardemam and cinnamon from, 112; elephants from, 136; exports to, 114; imports from, 95, 116; Indian nut in, 48; luxuries from, 114.

Charity and famine relief, 190-198.

Charts for navigation, 149.

Chatis, see cettis, 138.

Chawl, an important port, 141-142; indigo available near, 94.

Chetige see ceṭṭi, 136-7.

China, 119, 136, 144; camphor from, 145; exports to, 114; import of gold from, 110; opium from, 112-113.

Chitti (ceṭṭi), 139.

Christian IV, the Danish king, 128.

Cidambaram, 5, 152.

Cimtanagallu, a cèntre of the Vira Baṇajigas, 31.

Cinnabar, 46.

Cinnaiah (Cinana) Cetti (Mallai or Mallaya Cetti), 136.

Cochin, a port in the Malabar coast, 124, 143, 144, 149; different kinds of fish in, 107; export of spices from, 116.

Cocoanut, export of, 115.

Coimbatore, (Kan-pa-mei), cotton manufacture at, 105.

Coins, 174-179; /*vakoti cakras*, 163; *Bele*, 178; *Cakra gadyāṇa* 177; *Cāvala*, 179; *Ceitil*, 137; *Cinnam*, 1 8; *Cruzado*, 110, 112, 120, 179; *Damma*, 163, 169, 179; *Dinār*, 179; *Doddavaraha*, 177; *Ducato*, 123, 179, 202; *Fanam*, *haṇa*), 108, 176, 183; *Florin* 179; *Gadyāna (varaha, hon, pon)*, 39, 73, 176, 178, 181, 185; *Ghaṭṭivarāha*, 177; *Guilder*, 179; *Hāga*, 176, 178, 185; *Honnu*, 73, 185; *Haṇa (fanam)*, 73, 178, 183; *Hon (Poṉ, gadyāṇa)*, 178; *Jital*, 176, 179; *Kākini*, 178; *Kās'u*, 176, 179; *Kāti*, 176, 179; *Kāti gadyāṇa*, 177; *Larin*, 179; Pagoda, (*varāha*), 73, 163, 176, 177; *Paikam*, 168, 179; *Paṇam*, 36, 37, 66, 72, 73, 76, 78, 80, 81, 164, 165, 166, 167, 176, 179, 185, 194; *Pardai*, 112, 182; *Pardao*, 95, 111, 112, 156, 169, 173, 177, 182, 183; *Partab*, 176; *Poṉ*, see *varāha*, 36, 73, 176, 177, 178, 185; *Pratapa (partab)*, 176, 178; *real*, 179, 182: *Rekai*, 56; *Rekhai poṉ*, 71, 178; *Reis*, 93, 115, 177, 183; Roubles, 96; *S'akkarapaṇam*, 70, 181; *Tār (a)*, 176, 179; *Taurh*, 179; *Vāḷāḷ vaḷi tiṛandāṉ Kuḷes'ai paṇam*, 181; *Varāha* see also (*Gadyāna, Pon, Pagoda)*, 36, 73, 175, 176, 177, 178, 183; *Vintem*, 179, 183.

Commercial communities, in the Vijayanagar Empire, 17, 118-140.

Commercial Company, the, 125.

Communication, means of, 140-154.

Condama (Kondama), 129.

Copenhagen, 128.

Copper, production of, 98; import of, 110.

Coromandel coast, the, 67, 122, 128, 137, 138, 144; agricultural operations in the, 45, 62; Concentration of their attention in, by the English, 131; famine in the, 195-6; import of elephants to, 110; myrobalan available in the, 94; import of spies and drugs to, 112-113; ports in the, 144-145; use of the masala in, 148.

Corṭor (lella), broker, 139, 140.

Cotangi (cautang), 136.

Couto, on the results of the battle of Raksas Tangdi on Portuguese trade, 123.

Cranganore, English factory at, 130.

Crole, on the irrigation policy in Vijayanagar, 58-9.

Cuddalore, 145.

Cultivation, extension of, 37-8.

Cumbola, a port in the Canara country, 143.

Customs duty, 156-157.

Dabhol, an important port, 141, 142.

Dābul, 67; wheat in the area round, 45.

Dāmarla Venkaṭappa (Venkatādri Nāyaka), ruler of Wandiwash, grant of Madraspatam to the English, by, 133-135.

Dames, on the price of horses, 112.

Danasri, 119.

Dancing girls, ornarments of the, 100.

Dandige (Palaki) umbaḷi, land granted for the maintenance of a king's palanquin, 90.

Danes, the a commercial community, 124, 128-129; rivalry of the, with the English, 131.

Danish East India Company, the, 145.

Daquen (Dekkan), 113, 142.

Das'abanda, 77.

Das'avanda. (kattu kodage), 52.

Dayirya kodage, rent-free land for brave service, 91.

Debt and interest, 185-186.

Deccan, Decam, Dekkan, 96; import of elephants to, 110.

Devadan (y) a (tirunāmattukkni, lands granted to temples, 35, 86-7, 88.

Devalu Pāpa Rāya, 193.

Dēvanāmpattiṇam, a port in the Coromandel coast, 131, 145; Dutch factory at, 125.

Deva Rāva II, 15, 36, 52, 181: elephants of, 110; order of, ragarding taxes, 37.

Devi pattiṇam, 12.

Dharmapatan, a port in the Malabar coast, 143.

Dhanuṣkōḍi, 152.

Dharwar, 151.

Diamond, trade in, 95-7.

Diamond Treasury, 97.

Diu, a portuguese settlement, 119.

Divya bhoga svāmya, 84.

Dorasamudra, a centre of the Vira Baṇajigas, 31.

Dowry, sale of land to meet it, 68, 72.

Dutch a commercial, community, 17, 124-128: at Caturangapattiṇam and Nāgapattiṇam, 145; and the English, 130.

Drugs export of, 115-16; import of, 112-113

Dvārasamudra, 5.

Dubashes, 139.

Durgādēvi, a severe famine, 194.

Dyeing, an agricultural industry, 94.

Dyes, 46.

Ekabhogam tenure, 25, 26, 87.

Elephants, supply of, by Ceylon, 110-111, 136.

Elizabeth, Queen of England, 129.

Ellis, on taxaticn in Vijayanagar, 163.

Elphinstone, on the proprietor ship of land 81-82.

English, the, a commercial community, 124, 129-140; at Pulicat, 126-128.

Ettūr Immadi Kumāra Tātā cārya, repair of the tank at Tennēri by, 56.

Escheat, 85.

Exports from Vijayanagar, 114-117.

Fairs (*s'ante*), 154.

Famines, 193-198.

Fandarina, a port in the Malabar coast, 143.

Feringi (Portuguese), 150.

Feroz shah Bahmani, 136.

Fibres, 46.

Finished articles, import of, 113.

Fisheries, 106-107.

Fleet, Dr. on the Vira Baṇajiga, 31.

Food, in Vijayanagar, 200.

Food products export of, 114-115.

Francis Day, the factor of Armagon, 132-3 securing of the grant of Madras patam by, 133-135.

Fustas (brigantins) small ships, 147.

Gajapati, ruler of Orissa, 136.

Gaṇabhogam tenure, 25, 26, 87, 88.

Garadi umbali rent-free land for the maintenance of a gymnasium, 90.

Garden produce, 47-8.

Garsopa (Gerasoppe), 5, 149.

Gibbon on "objects of oriental traffic", 109.

Ginger trade in, 116.

Goa, 121, 122, 124; a Portuguese settlement, 119; an important port, 141, 142; building of ships in, 147; connected with Vijayanagar, 151; cotton and cloth around, 106; customs at, 157; imports from, 113; the Portuguese viceroy at, 120 slavery in, 20; trade of, with Vijayanagar 122-123.

Gold, import of, 110, 113; mining of, 97.

Gold Treasury, 98.

Golkonda, 130, 173; the Sultan of and the English, 132.

Goods, marketing of, 74.

Government, trade in the necessaries of the, 109-112.

Gracia de Orta, on rocks yielding diamonds, 96.

Grants, nature of, 84-5.

Gribble, on gold mines, 97.

Guilds, organisation and working of, 27-34

Gujarat, (Guzarate) wheat in, 45; Pulicat textiles in, 106

Guntur, sale of cotton thread in, 106.

Gurukkal (temple Priest), 17.

Guttagai, 164.

Gutti, a centre of the Vira Baṇajigas, 31.

Handege, a pot of unburnt clay, 60

Haravilāsam, of S'rīnātha, dedicated to Tippayya Cetti, 136.

Handicrafts, 101-105.

Harihara, 136, 163.

Harihara II, reform of the currency system by, 175.

Harinideva Voḍeyār, construction of a tank by, 52.

Hastināvati, a centre of the Vira Baṇajigas 31.

Hayavadana Rao, on the rate of taxation under Vijayanagar, 163.

Henderson, Major, on anicuts of the Vijayanagar period, 59.

Henrick Here, commandant of "Castell" 129.

Henry Sill, Agent at Masulipatam, 132.

Heras on the decline of Portuguese trade after the battle of Rakṣas Tangdi, 124.

Hippon, Captain, 129.

Honāvar, (Honor, Onor, Honāvuru), a port in the Canara country, 5, 45, 67, 116, 121, 142-143, 151; the head quarters of the pirates, 149; a centre of the Vira Baṇajigas, 31.

Honganūr, rules for the cultivation of lands in, 69.

Horse, import of, 111-112, 136; taxon, 123.

Household articles, 101.

Huligere, a centre of the Vira Baṇajigas, 31

Iḍakad, a port in the Malabar coast, 143.

Iḍangai community, 205.

Ikkēri, 5, 152.

Imports, 109-114.

'Indian corn' (millet or jowar), 46, 117.

India the Less, Sind, 98.

Industries:—agricultural manufactures, 93-95; mines and metallurgy, 95-101; handicrafts, 101-105; textiles, 105-106; fisheries, 106-107; characteristics of the, 107-108; encouragement of, by temples, 41.

Iron, import of, 113; mining of, 93.

Irrigation works, construction of, 48-53; maintenance and repair of, 53-57; settlement of irrigation disputes, 58; and the temple, 37-38.

Ivory, use of, 101

Jaga Rāya, Governor of San Thome, 129.

Jaiminiya Nyāyamāla Vistara, a commentary on the, by Mādhavācārya, 82 and 83 n.

Jalanogi, 136.

James I, treaty of, with the States General, 126.

Jaodella Ponte, part of, in the construction of a tank, 51.

Jarfattan, a port in the Malabar coast, 143

Java, import of spices and drugs from, 116

Jedda, imports from, 113.

Jewellery, 99-100.

Jiñji, Kṛṣṇappa Nāyaka of, 125.

Jivitapaṟṟu, 164, 204.

John of Monte Corvino, on agricultural operations in the Coromandel, 62.

Johnson, 130.

Jordanus, 98.

Kaḍai-kūṭṭutānattār, a merchant guild, 30, 32.

Kaḍaippū, land, 44, 62, 72.

Kāḍārambam, dry lands, 85.

Kaikkōlas, (weavers), 23, 80; engaged in the textile industry, 106.

Kaivinaikkuḍi, hired labourer, 63.

Kākkunāyaka viḷāgam, 62, 91.

Kālahasti, 5, 152; Velugoti family of, 133.

Kalheya, a centre of the Vira Baṇajigas, 31.

Kampili, 151.

Kaṇakku (accountant), 17.

Kāñci, (puram), 5, 30, 65, 152; a centre of the Vira Baṇajigas, 31.

Kāṇiyākṣi, 84.

Kannaḍiyas. (Hoysales), 80, 204.

Kan-pa-mei. (Coimbatore), 105.

Kār, 44, 61.

Karaikal, 131.

Karaiyīḍu, 26.

Karaṇika, of the *cāvaḍi*. 69.

Kaṭṭukodge (dasavanda), 52, 57.

Kāvalgars, 15, 158, 159.

Kāval kāṇi, 91.

Kāyal, a port in the southern extremity of South India, 12, 144.

Kāyamkulam, 151.

Khas lands, Royal demesne, 85.

'King's Guard', 14.

Koḍage (koḍangai), tenure, 90-91.

Koḍungallur, a port in the Malabar coast, 143.

Kolar, 67.

Kollainilam, a kind of agricultural land, 60.

Kondama (Condama), 129.

Koṇḍapalli, 152.

Koṇḍaviḍu. 5, 12, 141, 152; Kumāragiri of, 136.

Koṇḍavīḍu inscription of Nādiṇḍla Gopa, 117.

Koneṭi Ayyan(gār), 38.

Kovilkoṇḍa, 151,

Kōyil kaṇakku (*ōlai eluttu*), temple accountant, 40.

Kōyil kēlvi, manager of the temple, 40, 71.

Kṛṣṇadeva Rāya, 9, 14, 141; and Albuquerque, 111-12, 120; construction of a tank by, 50-51, 75; construction of Nāgalāpūr, by, 4; *dodda-varāha* of 177; elephants of 110; extent of the empire of 1; land survey by, 162; the harem of, 19; on charity, 191-192; on the encouragement of foreign commerce, 15⁻; on excessive taxation, 205; on the expenditure of the state income, 207; on the importance of irrigation, 49, 197; on the migration of people on account of heavy taxation, 79; purchase of horses by, 111; provision for water supply by, to Vijayanagar, 47; Rāyasam Koṇḍamarasayya, a minister of, 51; remission of taxes by, 36; treasury of, 182.

Kṛṣṇappa Nāyaka of Jiñji, *olla* of, to the Dutch, 125.

Kuḍai mānyam, see *S'attige umbaḷi*, 90.

Kuḍi, tenant, 63, 64, 79.

Kuḍikkāṇi, 63.

Kuḍimai, 77.

Kuḍimarāmat, 53

Kuḍiningādevadāna, 64.

Kuḍiningā irai yili, 64

Kuḍivāram, the share of the *kuḍi*, 63, 84.

Kuḍiyiruppu kāṇiyākṣi, 66.

Kumāragiri, of Koṇḍavīḍu, 136.

Kumāra Kṛṣṇamarasayyan, 75.

Kumbakōṇam, 5.

Kumbla (Cumbola),5; and the Portuguese 120.

Kuruvai, 45.

Kuttagai (*Uḷavu kaṇiyākṣi*) lease system, 65-66.

Lace, working of, in looms, 106.

Lakkaṇṇa Daṇḍanāyaka, issue of coins by, 181.

Land, boundaries of, 59-60; extension of cultivation and reclamation of, 74-81; value of, 72-73; yield from, 71-72.

Land tenures, systems of, 86-91.

Lead, import of, 110, 113.

Leather goods, 103.

Lella (cortor), broker, 139, 140.

Linschoten, on housing, 199; on diamonds, 96; on fish in India, 106-107; on the sale of slaves, 20.

Linga mudra, 59.

Livestock, 67-8.

Luxuries, import of, 113-14.

Maccassar, 132.

Maclean, Dr., definition of *amaram* by 88.

Mādhavācārya, (Vidyāraṇya) on assessment on land, 72; on the average yield from land, 71; on the proprietorship of land, 82-3; on rates of assessment, 162-163; on *vṛṣa*, 67-8.

Madhurai, 5, 152; migration of the Saurāṣṭras to, 108.

Madraspatam, grant of, to the English, by Venkaṭādri Nāyaka, 133-136.

Magadaimaṇḍalam, 80, 187.

Mahābhūmi, public land, 82-3.

Mahājanas, 53.

Mahānāḍu, (general assembly), 33.

Mahānavami festival, 19, 174.

Mahāprabhu, a dignitary in the merchant guild, 33.

Mahuan, on the place of the middleman, 139; on the value of a *taurh*, 179; on yogis, 192.

Makka, 144.

Mala(i)bar, 144, 145; camphor in, 113; export of rice to, 45, 74; fish in, 106; import of elephants to, 110; minerals in the rivers of, 95; Muslims in, 119; Pulicat textiles in, 106; trade in rice by, 114-115; Varthema on the condition of the people in, 202.

Malabarees, a trading community, 137-38, 150; trade of the, at Honavar, Cumbola etc., 143.

Malacca, (Malaqa), 144, 145; export of cloth to, 116; Portuguese trade with, 122; Pulicat-textiles in, 106; spices and drugs from, 112-113.

Maldive islands, making of ships in the 147; trade of, 143.

Malik Kafur, 35.

Mallaṇārya of Udayagiri, 51-2.

Mallappa Voḍeyār, 55.

Mallaya (Mallai) (Cinniah or Cināna Cetti) an influential merchant, 136.

Mallikārjuna Mahārāya, 85, 87, 207.

Manaikkuḍaiyār, 107.

Maṇavāri (*accukkaṭṭu*) lands, 71.

Maṇḍala, (assembly of the people), 204.

Māngāḍu, sale of lands in, 68.

Mangalor(e) (Mangalūr(u), a port in the Canara country, 5, 118, 143; export from, 114, 116; and the Portuguese, 120; issue of coins from, 181; a centre of the Vira Baṇajigas, 31.

Mañjalūr, a port in the Malabar coast, 143.

Manjēs'v(w)ar, a port in the Canara coast, 143; and the Portuguese, 120.

Maṉṟaḍi, member of the village council, 170.

Manufactured goods, export of, 116-17.

Manure, the supply of, 68.

Mānyam, 87.

Mercellus de Bosahowver, a Dutchman, 128.

Marudappar, marks of, 60.

Māsanikāra, 69.

• Mascat, 149.

Masulipatam, 128, 131, 132, 151; Dutch agent at 127; English settlement at, 129, 195; English factory at, re-opened, 132; fall of, in importance, 134; prices at, 183-*fn*.

Maṭhāpura, lands granted to *maṭhas*, 86-7, 88.

Maṭhas, grants to, 16, 86.

Mathew Duke, 127.

Means of conveyance, 153.

Measure: (area) *arroba*, 93; *ballas*, 71· *beṭṭu*, a unit of land, 44, 71; *Kanḍuga*, 57, 73; *Kāni*, 73; Kolagas, 73; *Kuḷi*, 73, 79; *Kuñca*, 57; *Kuṭṭi*, 162; *Mā*, 73; *Plough*, 78, 79; *Puṭṭi*, 57; *Salege*, 73. *Vēli*, 71.

Measure: (cubic) *Kalams*, 66, 71, 72, 76; *Khaṇḍis*, 73; *Marakkāl*, 187; *Nāḷi*, 194; *Padakku*, 78; *Tūṇi* 78;

Measure: (linear) *Gaṇḍaragaṇḍān Kōl*, 187; *Gandarāyagaṇḍan Kōl*, 187; *Mūvāyiravan Kōl*, 187; *Nāḍaḷavu Kōl*, 187; *Padināraḍikol*, 187; *Paṇiraṇḍāḍikōl*, 187; *Rājavibhāṭa nāḷapadineṭṭaḍikōl*, 187; *Rājavibhāṭan kōl*, 187; *Taḍi*, 187; *Ūnjalpārai s'arivutaḍi*, 187.

Mecca, 142; imports from, 113.

Melinde, demand for wheat, rice and millet in, 74; export of rice to, 114; import of gold from, 110.

Mēlvāram, (overlordship right in land), 63, 64, 65, 84.

Merchant guild, dominance of the, over trade, 109.

Metals, export of, to foreign countries, 116; import of, 113.

Methwold, the English factor at Pulicat, 127.

Meykāval (temple watchman), 17, 40.

Mines and metallurgy, 95-101.

Mint, 181.

Mirjan (Mergen), 5.

Moluccas, abandonment of the English factory at 127; cardamom and cinnamon from, 112; import of spices and drugs from, 116.

Moplahs, 119.

Moreland, on the farming system, 174; on the population in the Vijayanagar Empire, 8-9.

Moṭupalli, an important port in the east coast, 132, 146.

Mukhāsa village, 91.

Muluvāy, a centre of the Vīra Baṇajigas, 31.

Mummuriḍaṇḍa, 34.

Munro, Sir Thomas, on the condition of the people, 203; on the irrigation system under Vijayanagar, 59.

Muslims, a commercial community, 118-119.

Muttriraivāngi ilingayar (an examiner of seals?), 60.

My(ai)lapore, 5, 151; export of cloth from, 116; Rāmarāja's invasion of, 122.

Myrobalan, 46.

Nādindla Gopa, Kondavidu inscription of, 117.

Nāgalāpūr, construction of, by Kṛṣṇadeva Rāya, 4; houses in, 199; provision of water supply for 50-51; revenue from, 169.

Nāgaṇṇa Voḍayār, minister of Deva Rāya, 55.

Nāgapaṭṭiṇam, 5, 12; a port in the coromandel coast, 144-5; a Portuguese settlement, 124.

Nāgarasa Uḍaiyār, 205.

Nagarattār, (ceṭṭi), a merchant guild, 30, 32.

Nakhara Parivāra, 34; issue of coins by 181.

Namas's'ivāya Nāyaka, 76.

Nānādesi, 33, 34.

Nanjai, 61.

Narasāmbudhi, a tank, 50.

Narasimha Tirupati, colonisation of, 78.

Native merchants, 136-140.

Nāṭṭār, inhabitants of a district, 79.

Nāttudrōham, 204.

Navigation, charts for, 149.

Nāyakas, holders of military fiefs, 86, 88; and the police system, 158.

Nāyakatana, the rights of a *nāyaka*, 89.

Nāyakavāḍis, 62.

Nāyankara system, 174.

Nāyankara tenure, *(amaranāyaka)* 88-9.

Nellāyam, (nelmudal), 166.

Netta(sa)ra koḍage, (udirappaṭṭi) rent-free land granted for service rendered in the battle-field at the cost of life, 90.

Nicobar islands, the, import of spices from. 116.

Nicolo dei conti, on coinage in Vijayanagar, 175; on Indian ships, 146; on the population in the Vijayanagar Empire, 6; on the recovery of debt, 185; on the sandals used by the people, 103; on the size of Vijayanagar, 4; on slavery, 20; on the strength of the Vijayanagar army, 9; on the wives of the king, 19.

Nidhi, deposits of buried treasure, 84.

Nidugallu, a centre of the Vira Baṇajigas, 31.

Nikitin, on agriculture, 44; on the condition of the people, 202; on diamonds, 96; on piracy in the Indian waters, 150; on the port of Calicut, 144; on prices at Calicut, 182; on the strength of the Vijayanagar army, 9; on towns in the Vijayanagar Empire, 3-4; on the use of shoes by the people, 103.

Nikṣepa, 84.

Nilēs'var, a port of the Canara country, 143.

Nirkūli sarvamānyam, 91.

Nirnilam, a kind of agricultural land, 60.

Niyāyattār, judge, 170.

Nizam Shāh, 121.

Nuniz, on breeding places in the Dekkan, 67; on the condition of the people, 202; on the construction of a tank by Kṛṣṇadeva Rāya, 51; on the expenditure of the state income, 207; on feudal levies, 163; on the harem of Acyuta Rāya, 19; on Jao della Ponte, 51; on the 'King's Guard', 14; on the Indian merchants, 138; on the means of conveyance, 153; on the *nāyankara* system, 88-9; on the police system in Vijayanagar, 158; on the purchase of horses by Sāluva Narasimha, 156; on the purchase of horses by Sāluva Narasimha and Kṛṣṇadeva Rāya, 111; on the renting out of a gate at Vijayanagar, 159, 173; on the system of payment of wages to workmen, 108; on the use of basket boats, 148; on the use of ivory, 101; on the use of palanquins 102; on the Vijayanagar nobility, 12; on the royal demesne, 85.

Ōbammā, queen of Pulicat, 129.

Obi Rāju, brother-in-law of Venkaṭa II, 126.

Oil, manufacture of, 93-4.

Ōlai eḷuttu, see *koyil kaṇakku*, 40.

Old men, 97.

Onor (Honavar), 67, 121.

Opium, from China, 113.

Orissa, Gajapati ruler of, 136.

Ormuz, (Hurumañji), 142, 143; export of finished products to, 116; export of metals to from Bhatkal, 116; export of rice and cocoanut, 45, 71, 114-115; horses from, 111, 120, 136.

Paḍaividu, a centre of the Vira Baṇajigas, 31.

Pāḍikāval, 39, 78.

Paes, a Portuguese chronicler, on breeding places in the Dekkan, 67; on the construction of a tank by Kṛṣṇadeva Rāya, 50-51; on the extent of the Vijayanagar Empire, 1; on the fertility of land, 44; on groves of fruits, 47; on the harem of Kṛṣṇadeva Rāya, 19; on houses in Vijayanagar, 198-9; on the jewels of the kings, 100; on Kṛṣṇadēva Rāya's elephants, 110; on the means of conveyance, 153; on the organisation of the merchant guilds, 32; on the population in the Vijayanagar Empire, 4, 6-7; on prices at Vijayanagar, 183; on the road between Bhatkal and Zambuja, 152; on the rowing of the basket boats, 147-8; on the troops of Kṛṣṇadeva Rāya, 9; on the use of food grains, 46; on the use of shoes, 103; on the value of *pardao*, 177; on the vehicles of transport, 102; on the Vijayanagar army, 14; on the Vijayanagar treasury, 182.

Palaki umbali see *daṇḍege umbali.*

Paṇas, (groups), 29.

Pāñcālas (Vira) origin and functions of the 22-3; guild organisation among the, 28-9.

Paṇḍāra vāḍai (crown lands), 164.

Pārapatyagāra, 69.

Parās'ara, 162.

Paris'u, 148, 153.

Parivaṭṭam, 38, 78.

Parṛaḍai, 107.

Pāṣāṇa, stone, 84.

Pās'anam, 44, 61.

Paṭṭaṇasvāmi (ceṭṭi) president of the Nagaratiār, 32-33.

Paṭṭumilkārans (Saurāṣṭras), 108.

Payment, system of, 107 108.

Pegu, (Peeguu) 144, 145; exports of cloth to, 116; luxuries from, 114; Pulicat textiles in, 106; supply of elephants by, 110, 111; supply of rubies by, 95; trade of, with San Thome, 122

Pellicate (Pulicat), 126.

Penug(k)oṇḍa, a centre of the *Vira Baṇajigas*. 5, 31.

Penugoṇḍa Viraṇṇa, 51,

Pepper, production of, 46-7.

Persia, 123; exports to, 114, 116; horses from, 124.

Pettapoli (Peddapalli, Nizampatam), 127 132; English factory at, 130.

Philip III of Spain, recall of the Portuguese by, 124.

Philippo Sassetti, on the trade between Vijayanagar and Goa, 122-123; on the results of the battle of Rakṣas Tangdi on Portuguese trade, 124.

Pietro della Valle, on slavery in Goa, 20; on the road between Ikkeri and Sagar 152

Piracy, on the Indian coast, 149-151.

Poleacatte (Pulicat), 129.

Police, in Vijayanagar, 15, 157-159.

Ponani, a port in the Malabar coast, 143.

Pon baṇḍāram, treasurer, 17, 40.

Pondicherry 131, 133.

Ponmudal (*Kās'āyam*), 166.

Poonamallee, 135.

Population in the Vijayanagar Empire, 5-24.

Porto novo, a port in the Coromandel coast, 145; S'eṣādri Ceṭṭi of, 136.

Ports, in the Vijayanagar Empire, 140-146.

Portuguese the, a commercial power, 17, 116, 118; in the commercial life of South India, 119-124; and the Danes in India, 128; and the Dutch, 125, 126; and Goa, 142; on Nāgapaṭṭiṇam, 145; piratical activities of the, 150; at San Thome, 134, 145; and slavery, 20.

Portuguese company of India and the East, the, 125.

Possession, eight-fold rights of, 84.

Pottery, 103-104.

Prices, in Vijayanagar, 182-184.

Production, method of, 107-108.

Profession taxes, 169-170.

Pṛthvīs'etti, (*Pattaṇasvāmi*) 32-3.

Pṛthvīs'eṭṭi tana, mayoralty of the earth, 34.

Pulicat, (Poleacatte), (Pellicate), 5, 131, 151; a centre of textile manufacture, 105-106; an emporium of trade in the east coast, 145; cultivation of rice near, 45; export of cloth from, 116; Dutch factory at, 125-128; and the English, 129-130.

Pulses, production of, 46.

Punjai, 61, 62.

Punpayir, crops raised in the *punjai* land. 62.

Pu(i)rakkuḍi (*kuḍi*), 63.

Quick silver, import of, 110, 113

Quilon, a port, 139, 144, 150, 152.

Raghunātha Nāyaka, and the Danes, 128-129.

Raicūr, 5, 14, 152.

Rakṣas Tangḍi, famine after the battle of, 195; effects of the battle of, 205; plunder at, 182; result of the Hindu defeat at, on Portuguese trade, 123-24.

Rāmacandra Dīkṣita, 87.

Rāmānujakūṭam, 193.

Rāma Rāja, embas y of, to the Viceroy of Goa, 120-21; and the Portuguese, 122.

Rāma Rāja Viṭṭhaladeva Mahāraja, settlement of a boundary dispute by, 60.

Rāmes'varam, 5, 152.

Raṇi Bennūr, 151.

Raogy, a pirate, 149.

Rastell, President, on famine, 195.

Rattakoḍage (*Rattakuanḍqai*), rent-free land granted to the family of those that were unjustly killed in battle, 90.

Raw products, import of, 112-113.

Rāyasam Koṇḍamarasayya, minister of Kṛṣṇadeva Rāya, 51.

Rekhadaṇḍa, 49.

Retilim Cherim (ceṭṭi) Governor of Basrūr, 120.

Rice, cheapness of, 183; cultivation of, 45; export of, 114-115.

Rice, Louis, 159, 163; on the administration of justice, 172; on the revenues under Vijayanagar, 162.

River transport, 147-49.

Roads in the Vijayanagar Empire, 151-153.

Roelant Crape, a Dutchman, 128.

Rosyl, 67.

Royal demesne, 84-85.

Rural credit, 70.

Sadās'ivā Rāya and the Portuguese, 120-124.

S'adiravās'agam paṭṭinam (see Caturanga-paṭṭinam), 157.

Sadras, see Caturangapaṭṭiṇam, 145, 157.

Sāgar, 152.

S'āivācārya Kṣetras, lands granted to S'aivācārya *mathas*, 88.

S'ālias, the, engaged in the textile industry, 106.

Salsette, 120.

Salt, production of, 98-99.

Sāḷuva Narasimha, purchase of horses by, 111, 156.

Sāḷuva Nāyaka, 78.

Sāḷuva Vīra Narasimha Nāyaka, (Salvanayque or Sāluva Daṇḍanāyaka), 12.

Samayācāryas, 21.

S'āmi Ceṭṭi, brother of Tippayya Ceṭṭi, 136.

Sandal wood, 46: export of, 115.

Sangitapura, 5.

Sante (fairs), 74, 154.

S'an Thome, a port on the coromandel coast, 122, 133. 145; Jaga Rāya, governor of, 129; the Portuguese, at, 134.

Sari, a centre of the Vira Baṇajigas, 31.

S'arivāram, 64.

Sarvamānyam, 72, 87.

S'attige umbaḷi, (Kuḍaimānyam), rent-free land for the maintenance of the umbrella of the king, 90.

Saurāṣṭras (Paṭṭunūlkārans) migration of the, to Madhurai, 108.

Security in the Vijayanagar Empire, 157-159.

Senabova, 69.

Servai (service *inām*), 164.

S'eṣādri Ceṭṭi of Portonovo, 136.

Sewell, R, on the condition of the people, 202-203; on the royal demesne, 85; on the use of quick silver in gold mining. 97-8.

Shālīāt, a port in the Malabar coast, 143,

Shaykh Zaynu'd-Din, author of the *Tahfat-al-Mujāhidīn*, on the capture of Indian trade by the Portuguese, 118-119.

Shipping, 146-148.

Ships, making of, 103.

Silver, import of, 110, 113.

Simhācalam, 152.

S'ingapaṭṭaṇa, a centre of the Vira Baṇajigas, 31.

S'ingaya Bhaṭṭa *(jalasūtra)*, 50.

S'ittama Nāyaka, Rehabilitation of a village by, 79.

S'ivasamudram, 152.

Slavery, 20-1.

Soil, proprietorship of the, 81-5.

Soria, 123.

Spices, export of, 115-16; import of, 112-13, 117; production of, 46-47.

S'rigirinātha Voḍeyar, donation for a catra by, 193.

S'ri Kūrmam, 152.

Simhavikramapaṭṭaṇa, Tippayya Ceṭṭi of, 136.

S'rinātha, author of the *Haravilāsam*, 136.

S'ri Ranga, III, 38; confirmation of the grant of Madraspatam to the English, by, 134-36.

S'rirangam, 5.

S'rirangapaṭṭaṇa, 5, 152.

S'riranga Rāyapatam, same as Madraspatam, 135.

S'ris'ailam, 5.

S'rivilliputtūr, 5.

S'rotriyam, 87.

States General, treaty of the, with James I, 126-7.

State, the, and commerce, 154-160; and irrigation, 52-53; share of the from the produce of land, 162.

Sthānattār, 39.

Strīdhana, dowry, 68.

Sugar, export of, 115; manufacture of, 93, 94.

Sugarcane, 46; rules for the pressing of, 69.

Sulphur, digging of, 98.

Sumatra, 144, 145; camphor from, 113; cardamom and cinnamon from, 112; export of cloth to, 116.

S'utta Koḍage, 91.

Svāmi Narasā Nāyakkar, 39.

Svarūpa (?), 80.

Sykes, Colonel, on charity in India, 190.

Tahfat-al-Mujāhidīn, a work of Shaykh Zaynu'd-Din, 118.

Tailoring industry, 106.

Talayari, 158.

Tañjāvūr (Tanjore), 5, 12; Raghunātha Nāyaka of, 128, 129; Tranquebar acquired by the Danes from the Nāyak ruler of, 145; Nāyak of and the English, 130-131.

Tantrimār, 79.

Tānūr, a port in the Malabar coast, 143.

Tariyakallu, a centre of the Vira Baṇajigas, 31.

Taxation system, 161-174; *adhikāri kāṇikkai*, 41; *āḷamañji*, 53, 72; *āḷvari*, 171; *angas'ālai*, 37; *aras'upēṟu*, 36, 77, 80, 164, 165, 166, 170; *aris'ikāṇam*, 37; *as'upōḍu*, 78; *āyam*, 77, *bedige* same as *veṭṭivari*, 173; *Cavala*, 169; Commercial taxes, 167-169; Customary payment 173; *daḷavili*, 172; *daṇṇāyakasvāmya*, 172; *daṇṇāyakarmagamai*, 172; *ērimīn-vilaippaṇam*, 54; *iḍaituṟai*, 80: *iḍangai-vari*, 205; *inavari*, 205; *industries tax*, 171; *joḍi*, 36, 37, 56; *judicial income, and fines*, 172-3; *kaḍamai*, 77, 81; *kal-lāyam*, 170; *kāṇikkai*, 39, 70, 77, 80-165, 170; *kāṇikkūli*, 165; *kariviāyam*, 170; kās'āyam (*poṉmudal*), 166; *Kaṭ-ṭāyam*, same as *veṭṭi vari*, 37, 173; *Kaṭṭigai*, 41; *kaṭṭumūkkai*, 78; *kīṟṟu*, 170; *koṭṭaimagamai*, 172; *koṭṭai paṇam*, 172; *koṭṭu*, 170; *kuḍi*, 80; land tax, 161, 166; *māḍu kāṇikkai*, 80; *Magamai*, 77; *makkaḷpēṟu*, 78; *māmūlādāyam*, 167; *mārgādāyam*, 159, 167; method of the collection of taxes, 173-174; *mis'am*, 78; *movai*, 41; *mugampārvai*, 37; *nīrōlai*, 165; *paḍaikāṇikkai*, 172; *paḷavari*, 77; *pās'i*, 55; *paṭṭavaṭṭam*, 165; *paṭṭaya-kāṇikkai*, 172; *pērkkaḍamai*, 171; *piḍāri vari*, 172; *piḷḷaivari*, 171; property tax, 166-167; *Puduvari*, 77; *Puṟavari*, 80, 204; *s'amb(m)adam*, 37, 165; *s'ekku kaḍamai*, 94; social and communal contributions, 172; *sthalā-*

dayam, 167; *s'ulavari*, 36, 56, 172; *s'umai*, 173; *sunkam* (Junken) 135; *tirigai ayam*, 170; *uliyam*, 173; *vas'al-kulippanam*, 54; *vas'al panam*, 77, 167; *vattam*, 170; *velikkulippanam*, 54; *vetti-vari*, 172; *vibhuti kanikkai*, 56, 172; *vilvari*, 172; *viniyogam*, 80; *vis'esada-yam*, 37.

Teakwood, export of, 115.

Tel(k)akal(n)ambi, a centre of the Vira Banajigas, 31.

Telugu Vellalas, migrations of the, 11.

Temple, the, 16-17;and the construction of tanks, 52; encouragement of the weaving industry by, 108; and famine relief, 197-8; and the maintenance of tanks, 55; place of the, in the economic life of the people, 35-41; and the reclamation of land, 78; and the repair of tanks, 56, and rural credit, 70.

Tenures of land, 86-91.

Textiles, 10?-106.

Thomas Ivie, the chief of Masulipatam, 132.

Timoja, a pirate; 149, 150.

Tin, import of, 110, 113.

Tippayya Cetti of Simhavikrma pattnana, a merchant prince, 136.

Tirukkoil (Tirukkoyilur), 12.

Tirumadai vilagam, 41.

Tirumala Cetti, brother of Tippayya Cetti, 136.

Tirumalairajanpattinam, (Triminipatan) a port in the coromandel coast, 145; Dutch factory at, 125.

Tirumalaraja. Pradhana, 33.

Tirunamattukkani same as *Devadana* lands, 60, 88.

Tirunelveli, 5, 151.

Tirupati, 5, 151, 152, 193.

Tiruppadiyam, 40, 41.

Tiruppanangadu, repair of a tank by the temple at, 56,

Tiruvaigavur, 203.

Tiruvamattur, provision for a *catra* at, 193; repair of the lake at, 56; sale of lands by the residents of, 52.

Tiruvannamalai, 5, 152.

Tiruvarankad, a port in the Malabar coast 143.

Tiruvidaiyattam lands, 65.

Tiruvilakkukkudi, (servants in charge of lighting), 40.

Towns, in the Vijayanagar Empire, 3-5.

Tuias (Tiyas) 94.

Turner, Sir Charles, on the private ownership of the soil in Malabar, 83.

Trade, articles of, 109-117; inland, 151-154; methods of, 138-140.

Trade routes, 148-149.

Tranquebar, a port in the coromandel coast, 131, 145; cession of, to the Danes by Raghunatha Nayaka, 129.

Transport, means of, 140-154; Vehicles of 102.

Treasury of the temple, 39.

Treaty of Defence, between the Dutch and the English, 16, 19, 126-7.

Trincomali, cession of, to the Danes, 128.

Trinetra Kaccirayar, 205.

Trinetranatha, Kaccirayar, Governor of S'rimusnam, 80.

Tyagan(n)a Nayaka, 80, 205.

Ubhaya nanades'i, (*Nanades'i*), a merchant guild, 30.

Udaiyar Devarasa Udaiyar, 54.

Udayagiri, 5, 12, 141, 152; a centre of the Vira Banajigas 31.

Uddhare, 5.

Udirappatti, same as *Nettara kodage*, 90.

Ulavu Kani, 37, 78.

Ulavu kaniyaksi, same as *kuttagai*, 75.

Ual, and the Portuguese, 122.

Umbali(ge), rent-free land granted for public service, kinds of, 89-90.

Upparaeu, manufacturers of salt, 29.

Ur, 24, 25.

Uravar, 70.

Uttaramerur, 58.

Vadda vyavahari, 33.

Vais'ya vaniya nagarattar, a merchant guild, 30, 31-2.

Vajra Karur, mines in, 95.

Valangai community, 205.

Valuvur, reclamation of lands in, 76-7: repair of the irrigation channels in, 55.

Vamana mudra, 59.

Varaha lancana, 177.

Varam system, 64-5.

Varthema, on breeding places in the Dekkan, 67: on the brokers, 139-140: on the condition of the people in Malabar, 202; on the cultivation of rice in Calicut 61; on the money changers at Calicut, 180; on the price of horses, 112: on the recovery of debt, 186; on the security in the Vijayanagar Empire, 157; on the ships at Calicut, 146; on the insufficient clothing of the people. 201; on sugar at Bhatkal, 93; on the use of shoes by the people: 103; on the value of a *pardao*, 177; on the value of *tare*, 179: on the wealth of the Vijayanagar King, 182.

Vās'al Ādiyappa Nāyaka, 80.

Vascoda gama, on the dress of the rich men, 202; on the money changers, 180; on prices at Calicut, 182-183.

Vastrarakṣakas, (tailors), 106.

Vāsudeva Nāyakkar Tirumalai Nāyakkar of Magadaimaṇḍalam, 187.

Vellore, 124, 129.

Venkaṭa II, 193; and the Dutch, 125-126; and the English, 129-130; and the Portuguese, 124.

Venkaṭa III, 133.

Venkaṭādri Nāyaka, (Dāmarla Venkaṭappa), 133.

Veṭṭi, 37.

Vijayanagar Bisnaga(r) (Bizenagar, Narasinga, Narsinga, Narsyingua), 7, 44, 96, 113, 123, 124, 142, 144, 177, 181; a well provided city, 117; breeding of elephants at, 111; cheapness of articles at, 183; fair at, 154; flower in, 48; housing in, 198-200; moorish quarter in, 118; population in, 6-7; provision of water supply for, 47; trade of, with Goa, 122-123. renting of a gate at, 159-160, 173; roads from, 151, 152; trade of, with Goa, 122-123.

Villages, in the Vijayanagar Empire, 2-3; isolation of, 69-70;

Village sabha, origin and functions of, 24-7; and the maintenance of tanks, 54-55.

Vingapor, 67.

Vīrabaṇajigas, (*Vīra Banajus*, *Vīra Valañjigar*), a merchant guild, 30, 31, 32.

Virappa Nāyaka, and the Pāñcalas, 23.

Vīravasam, 132.

Viraya, encouragement to, for the rehabilitation of a village, 79.

Viriñcipuram, 30.

Virūpaṇṇa, the *Talāri* of Vijayanagar, 51.

Vis'vakarma, divine architect, 22.

Vṛtti, share, 88

Wandiwash, Venkaṭādri Nāyaka, the ruler of, 133.

Weapons of war, 100-101.

Weight, *Arroba*, 115; *Bahares*, 146; *Locot*, 96: *mangelins*, 95, 96.

Wheat, cultivation of, 45-6.

Wilks, 163.

William Methwold, on the effects of the civil war, 195.

Wilson, on the titles of the king over land, 82,

Wood, use of, 101-103.

Yajñaras'ar, the *adhikāri* of Tirumalai, 58.

Yemen, export to from the west coast, 116

Zambuja, 152.

Zambuquoo, 143.

Zamorin of Calicut, 130.

ERRATA

Page	Line	read	for
12	28	of	or
29	11	say	says
39	31	individual	invidual
40	3	*ōlaieḷuttu*	*ōlaiḷuttu*
40	4	watchman	watchmnn
40	5	*poṉbaṇḍāram*	*poṉbaṇ dāāram*
41	13	that	tbat
44	17	annually	annully
47	5	cardamom	cardamon
60	13	*muttirai*	*muttira*
60	21	between	betwecn
61	10	observe	obeserve
81	23	of it	it of
82	32	Mādhavācārya	Madhvācārya
89	20	it	them
90	11	*s'attige*	*s'attigi*
93	fn. 2	*reis*	*ries*
98	fn. 26	*Economic*	*Economie*
111	26	Ormuz	Ormz
112	25	cardamom	cardemam
136	fn. 80	Srinivasachari	Srinivachari
143	26	Maldive	Madlive
153	22	transport	transportation
163	31	Further	Furthe
170	last line	uvaecans	Uvaccaus
170	,,	toddy-drawyers	toddy-drawlers
182	fn. 93	Sewell	Sewoll
184	,, 20	Pagoda	Pagodo
185	17	*gadyāna*	*gadyaa*
200	2	of	ot
201	9	country	eountry
208	26	one	ono